

FIG. 1

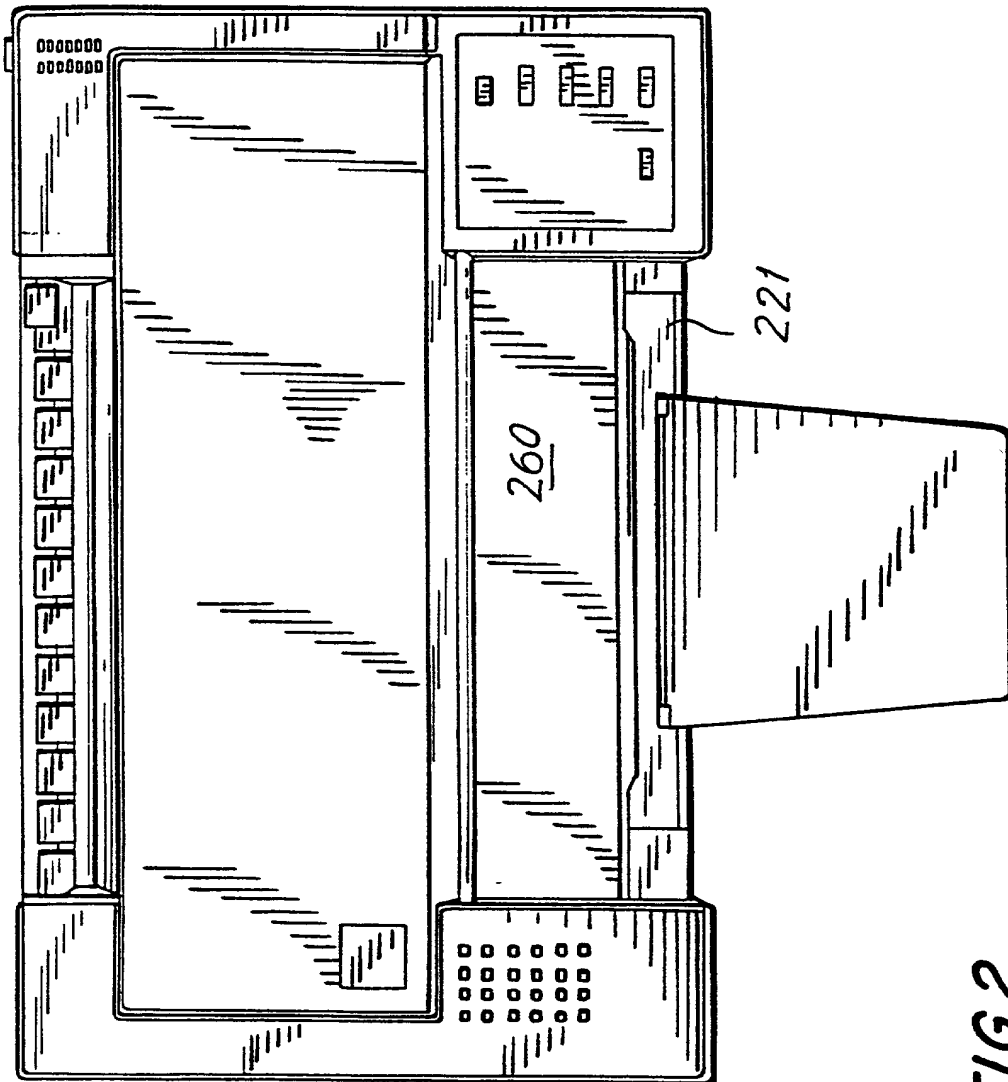


FIG. 2

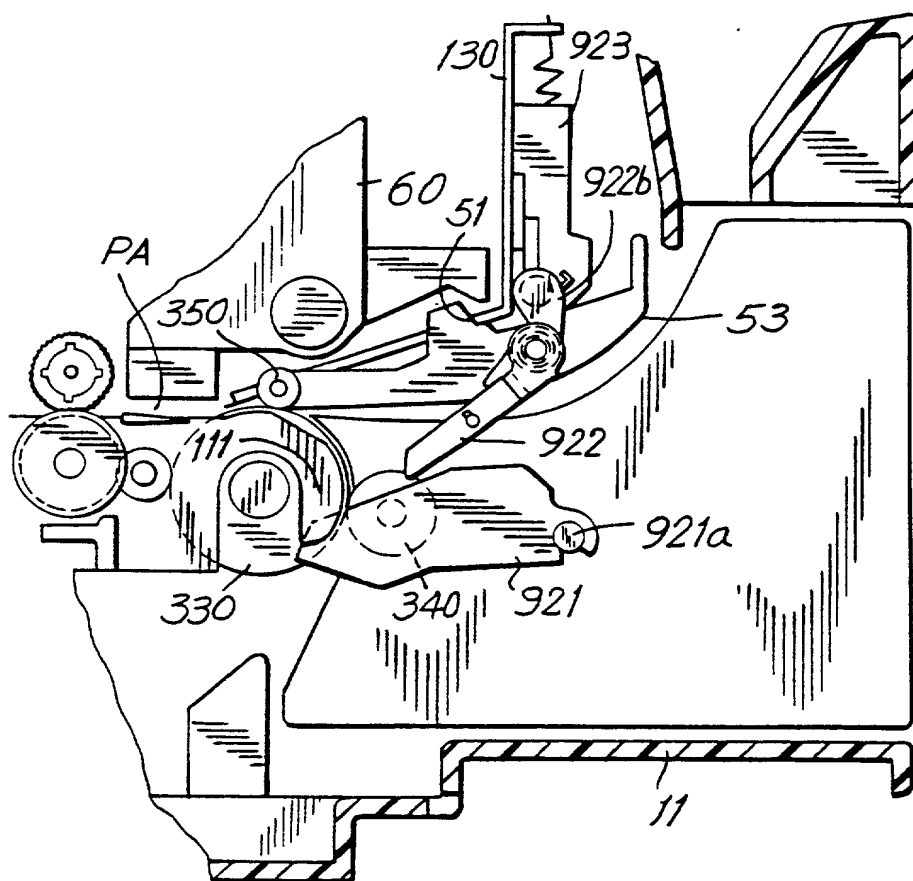


FIG. 3B

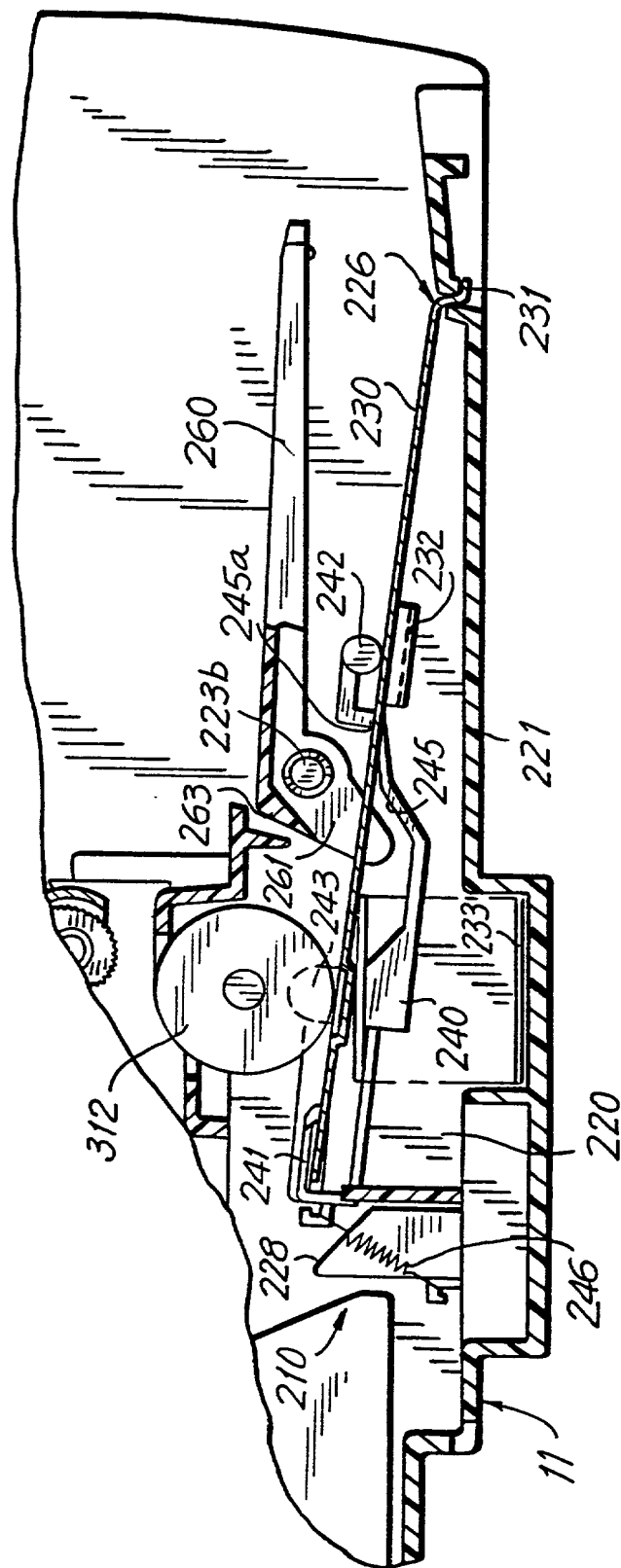


FIG. 4

FIG. 5

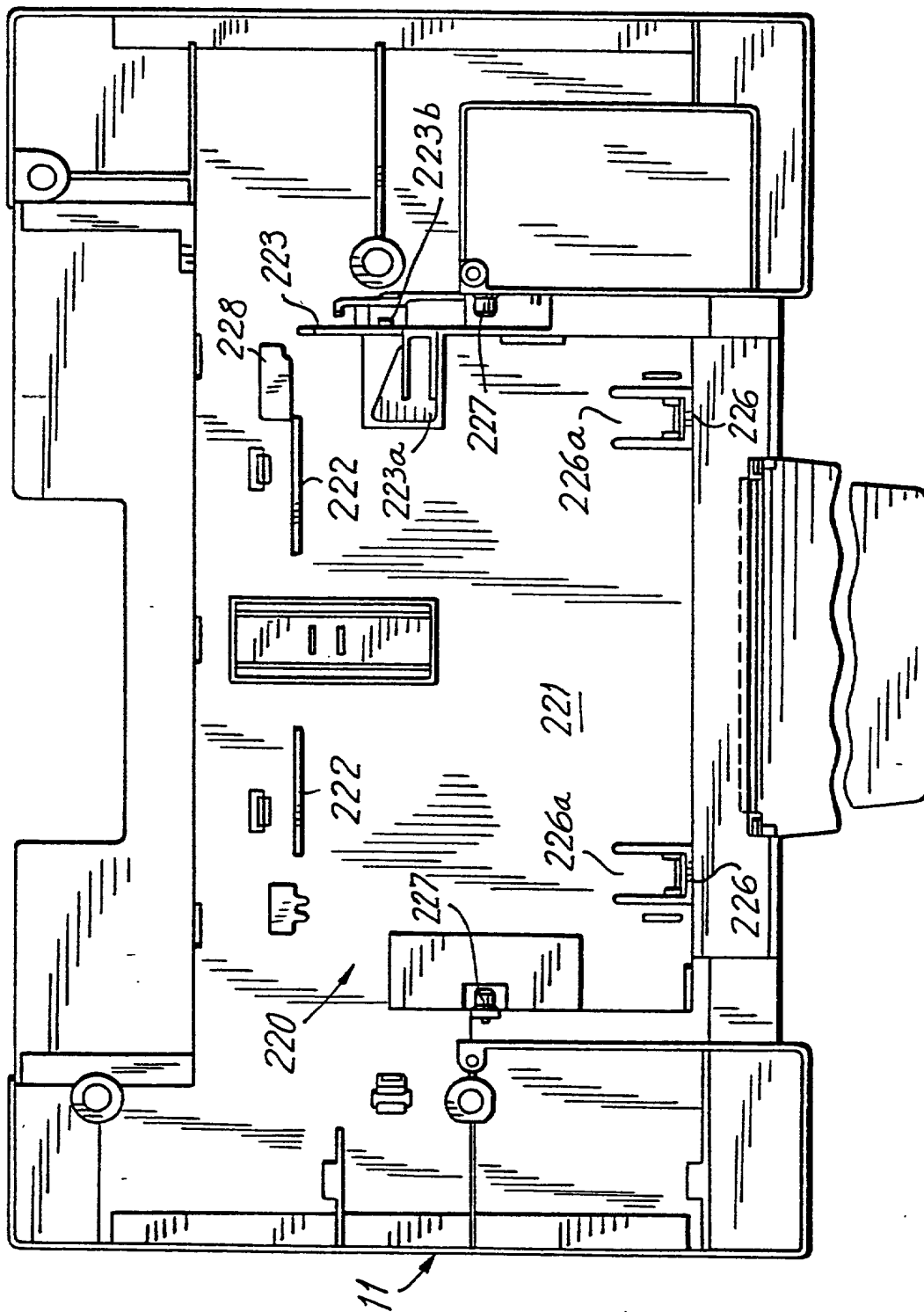


FIG.7a

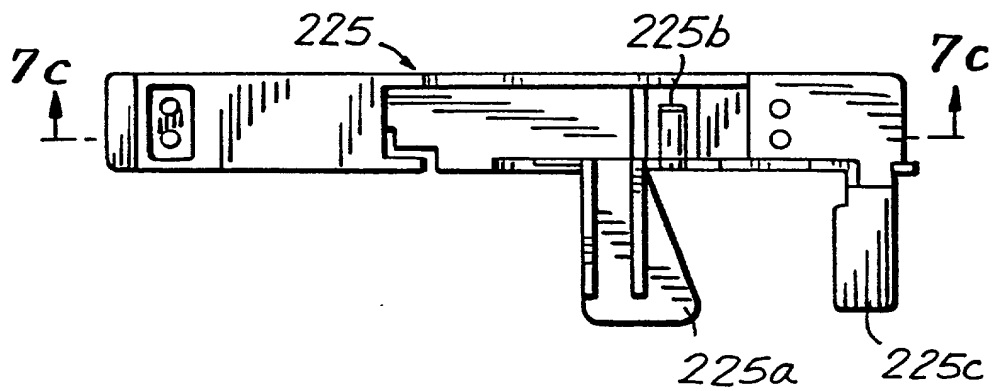


FIG.7b

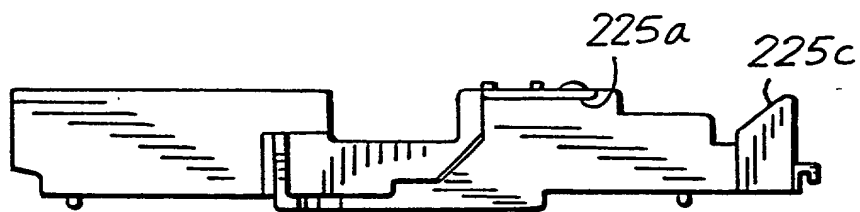


FIG.7c

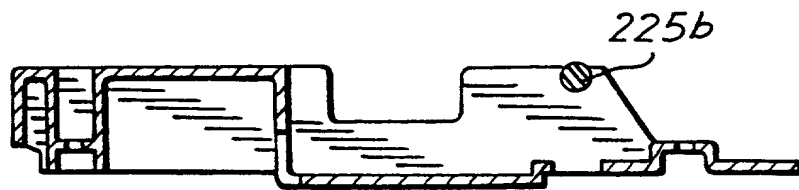


FIG. 8a

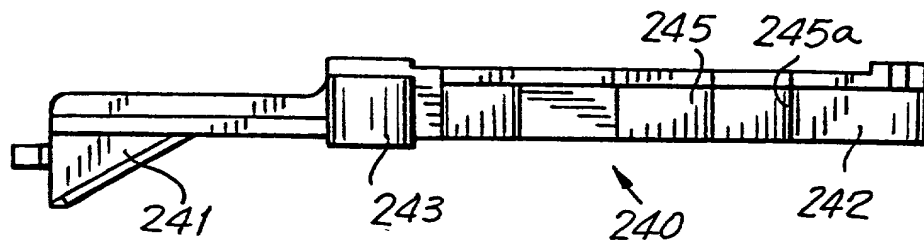


FIG. 8b

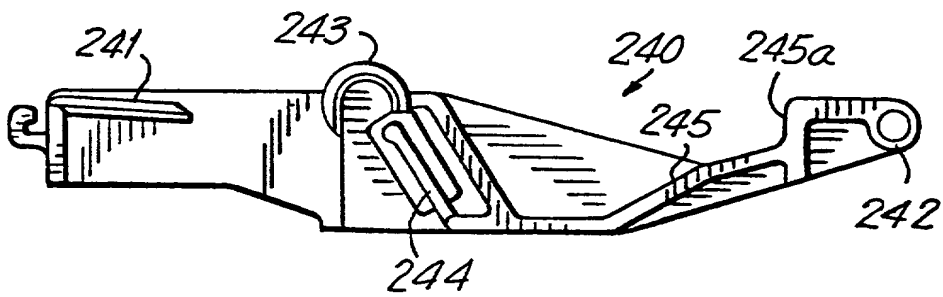


FIG. 8c

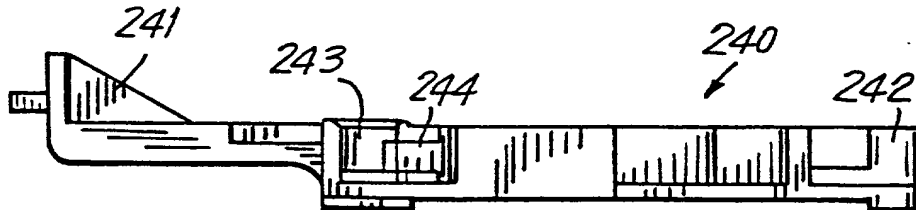


FIG.9a

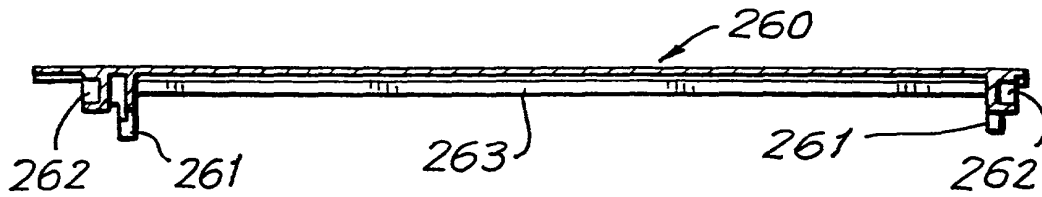


FIG.9b

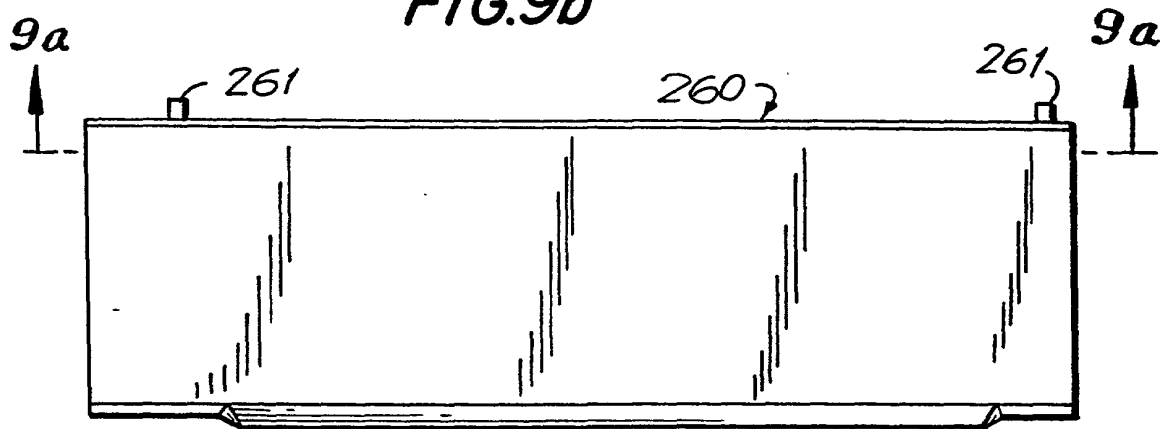


FIG.9c

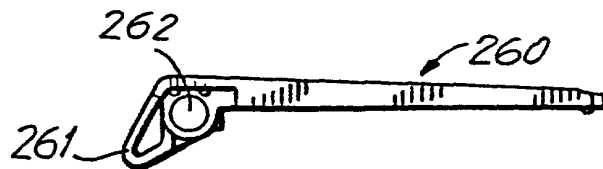


FIG.10

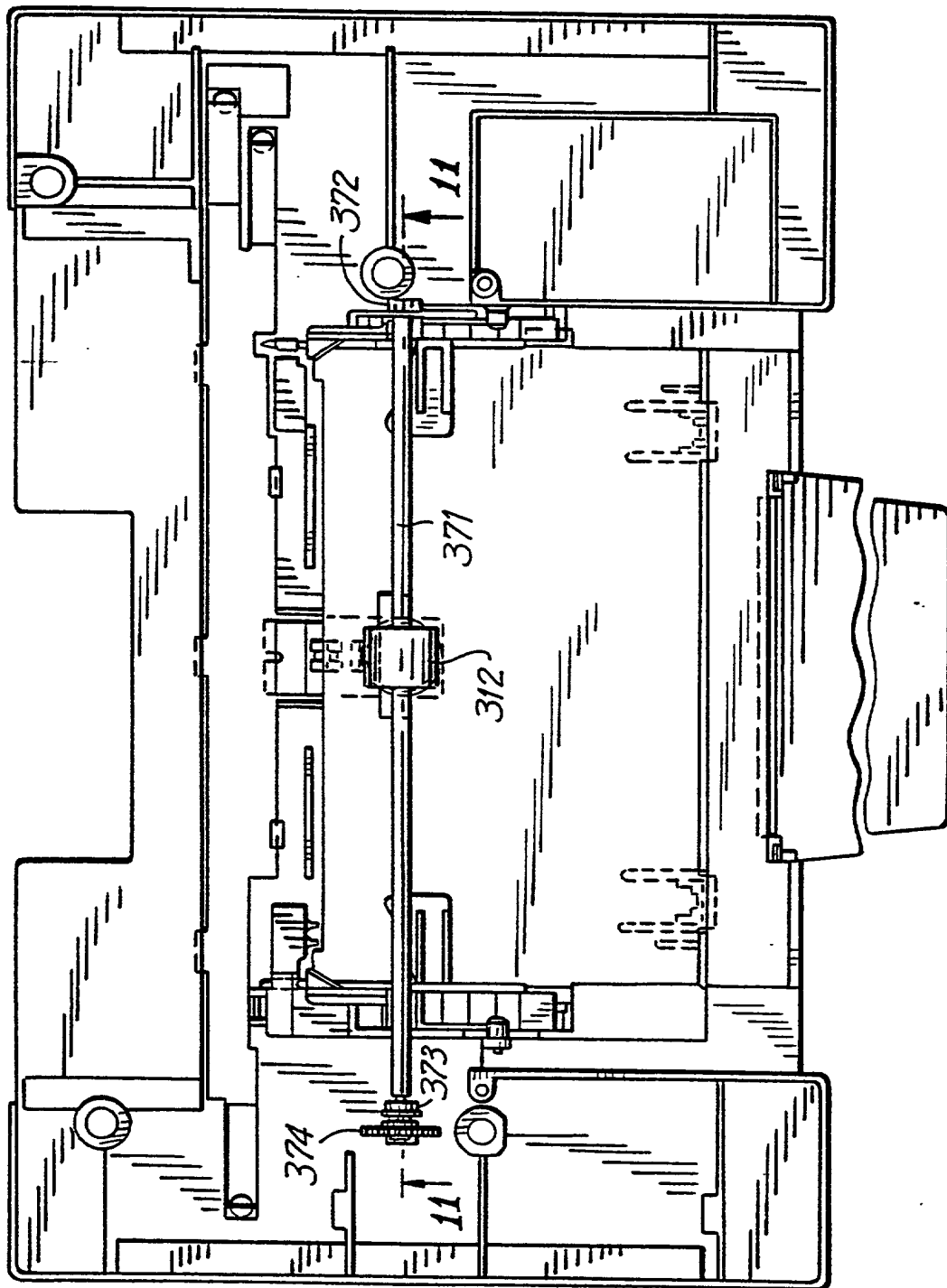


FIG. 11

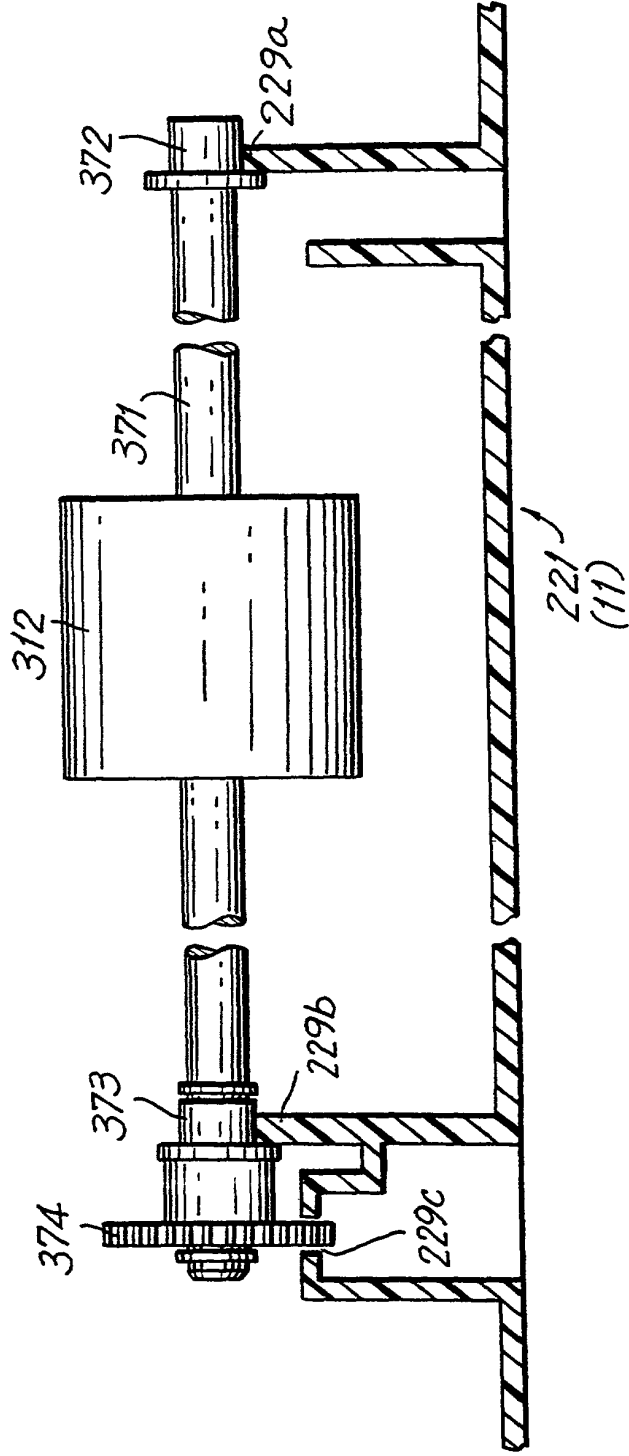


FIG.12

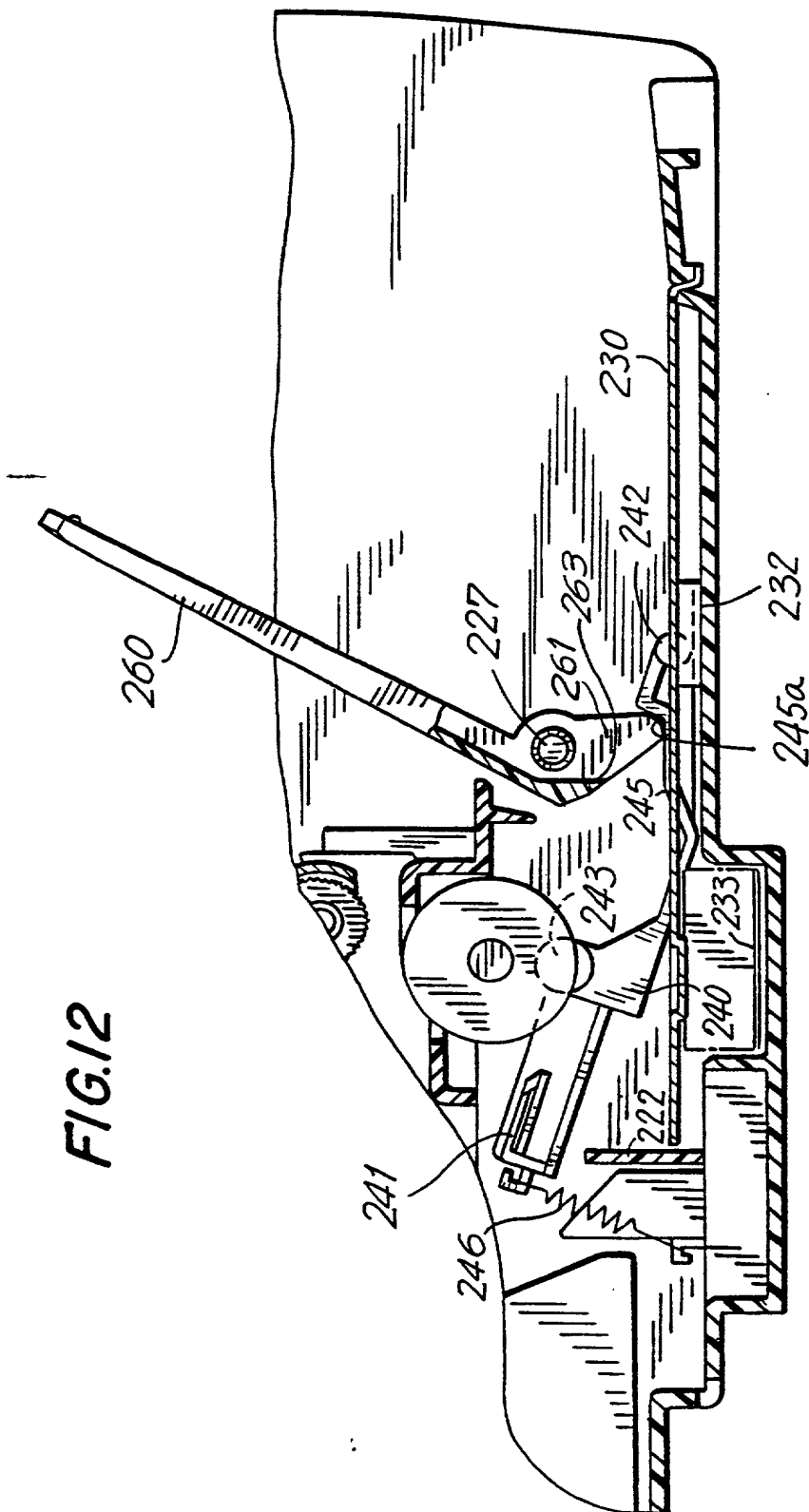


FIG.13

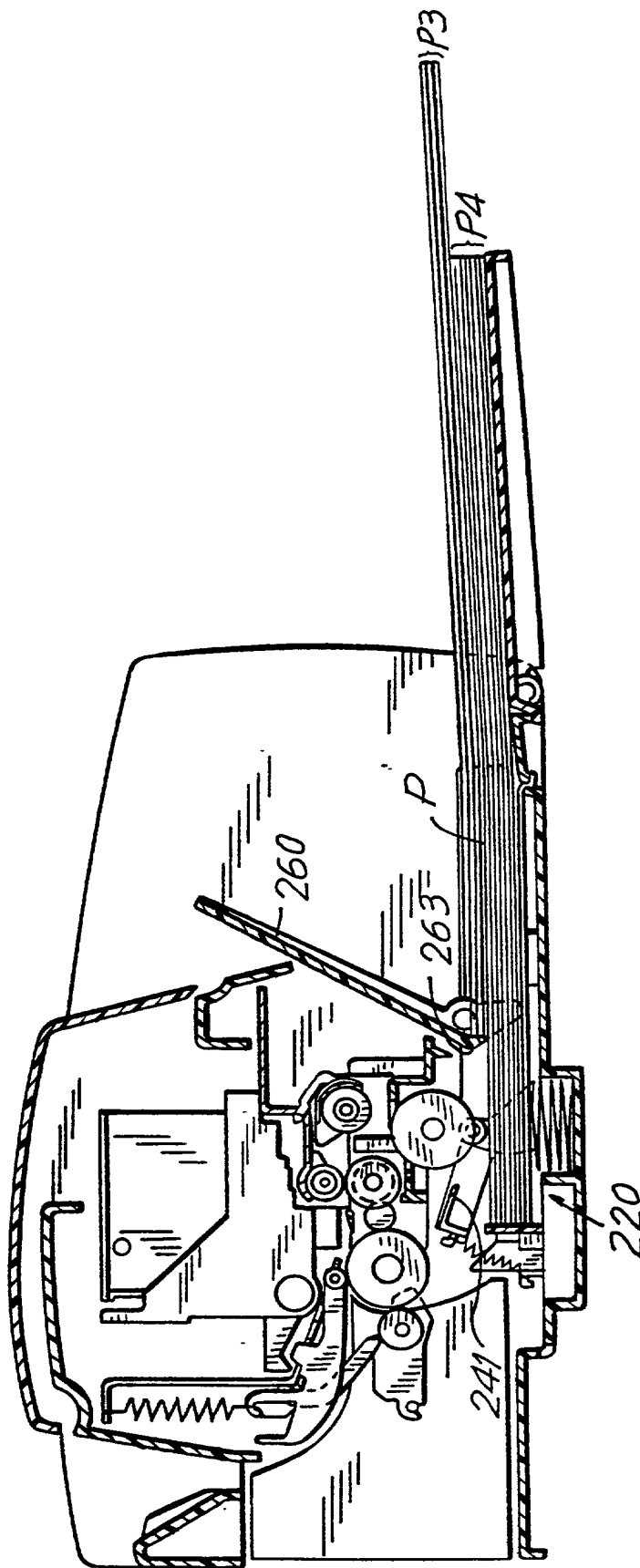


FIG.14

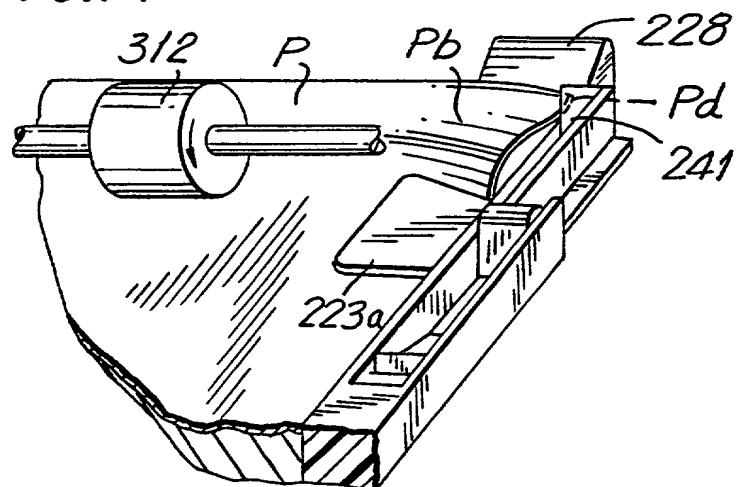


FIG.15

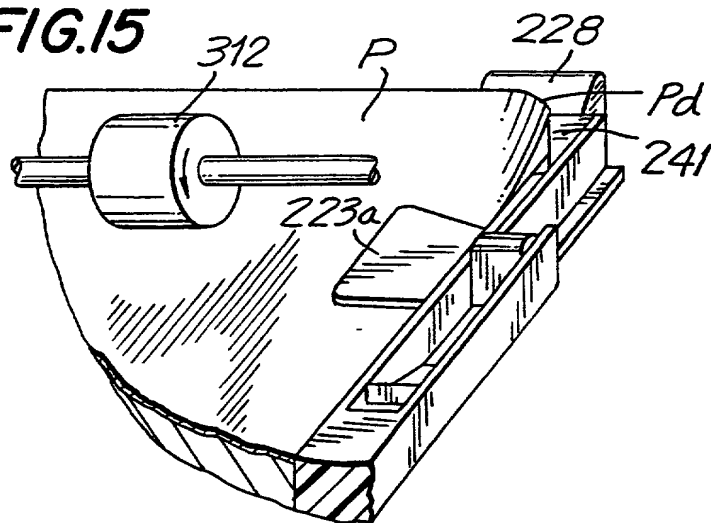


FIG.16

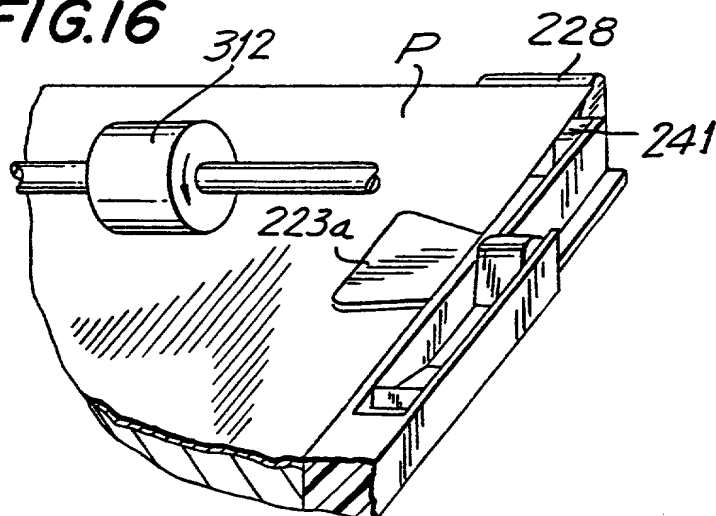


FIG.18

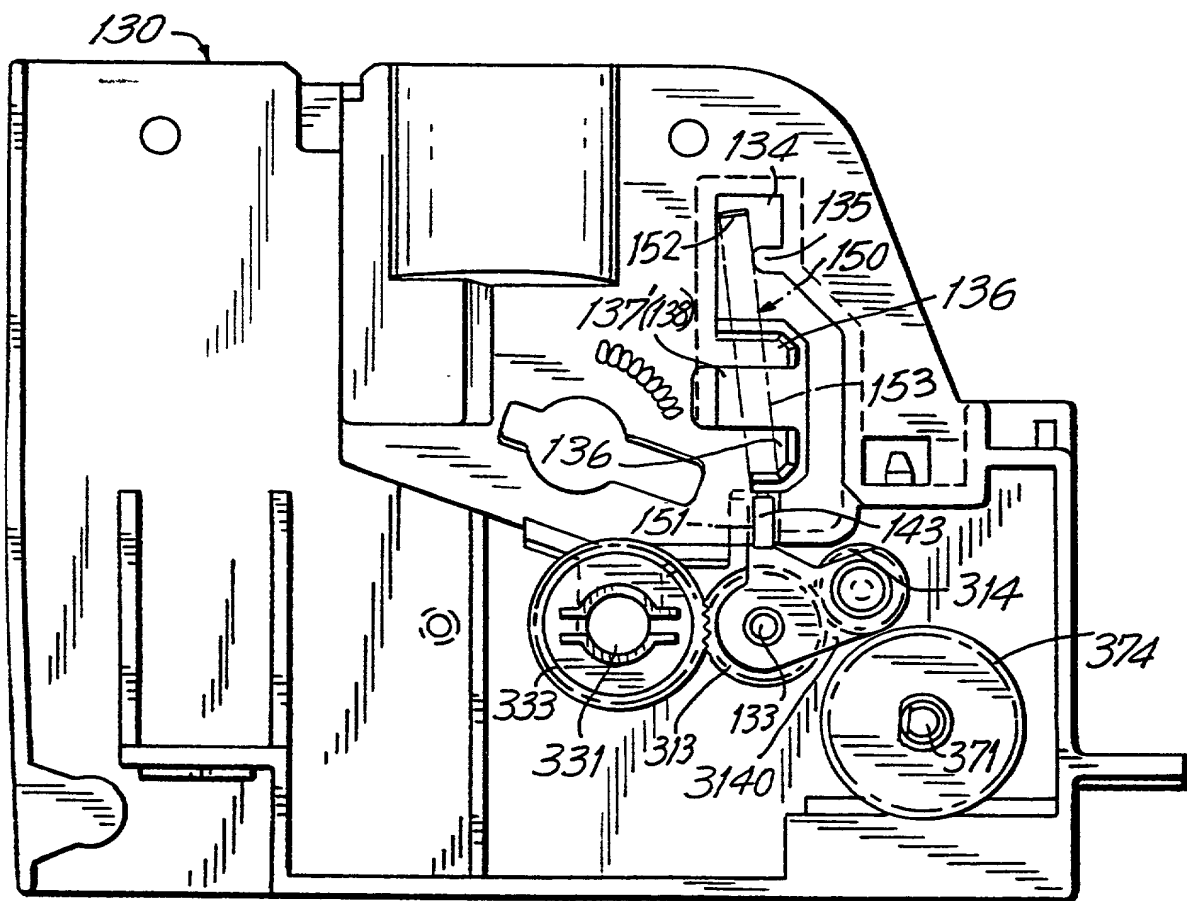


FIG. 19

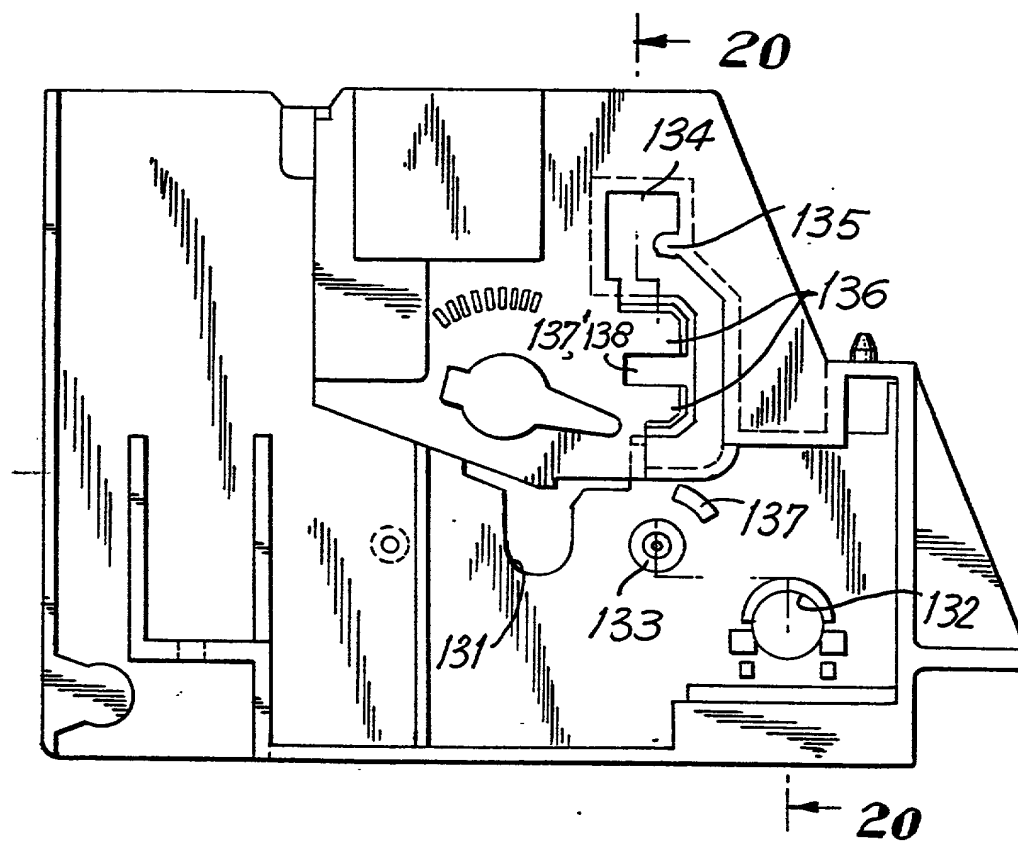


FIG. 20

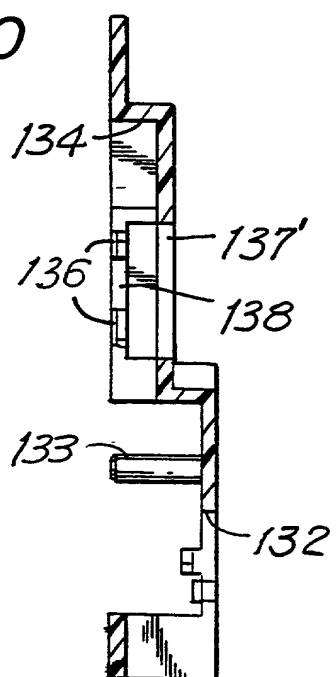


FIG. 21e

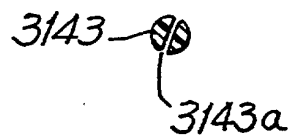


FIG. 21d

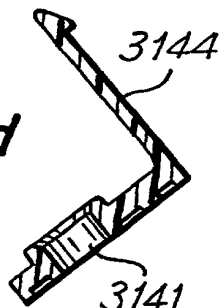


FIG. 21a

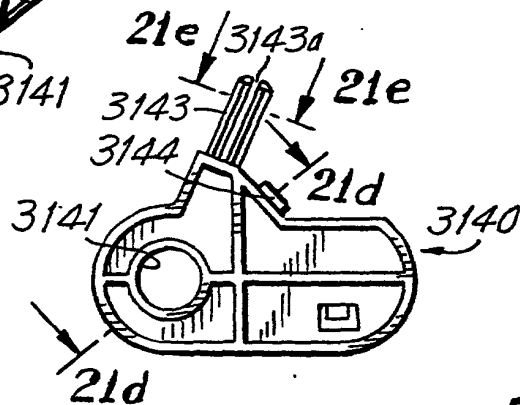


FIG. 21g

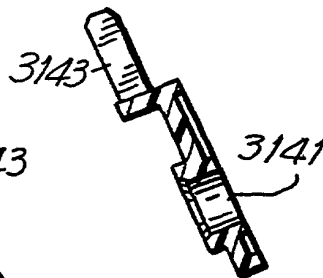


FIG. 21b

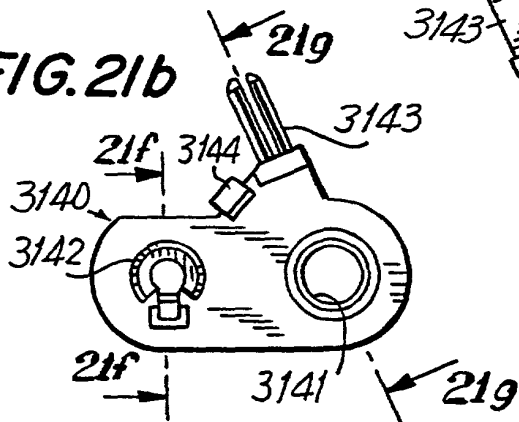


FIG. 21f

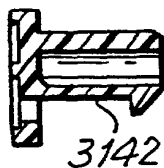


FIG. 21c

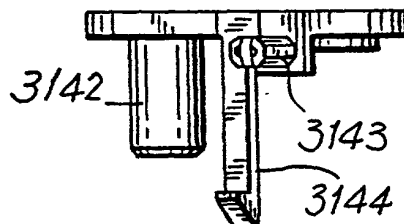


FIG. 22a

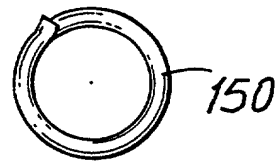


FIG. 22b

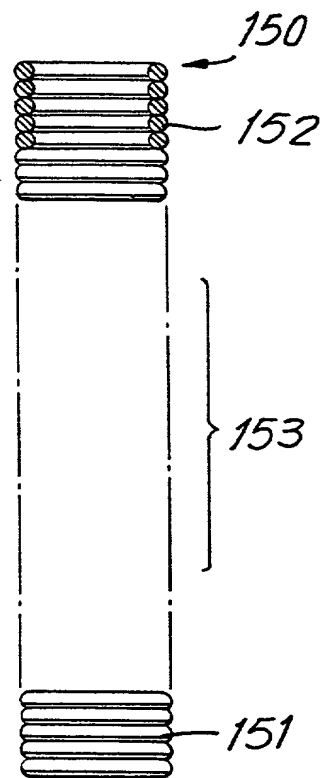


FIG. 23

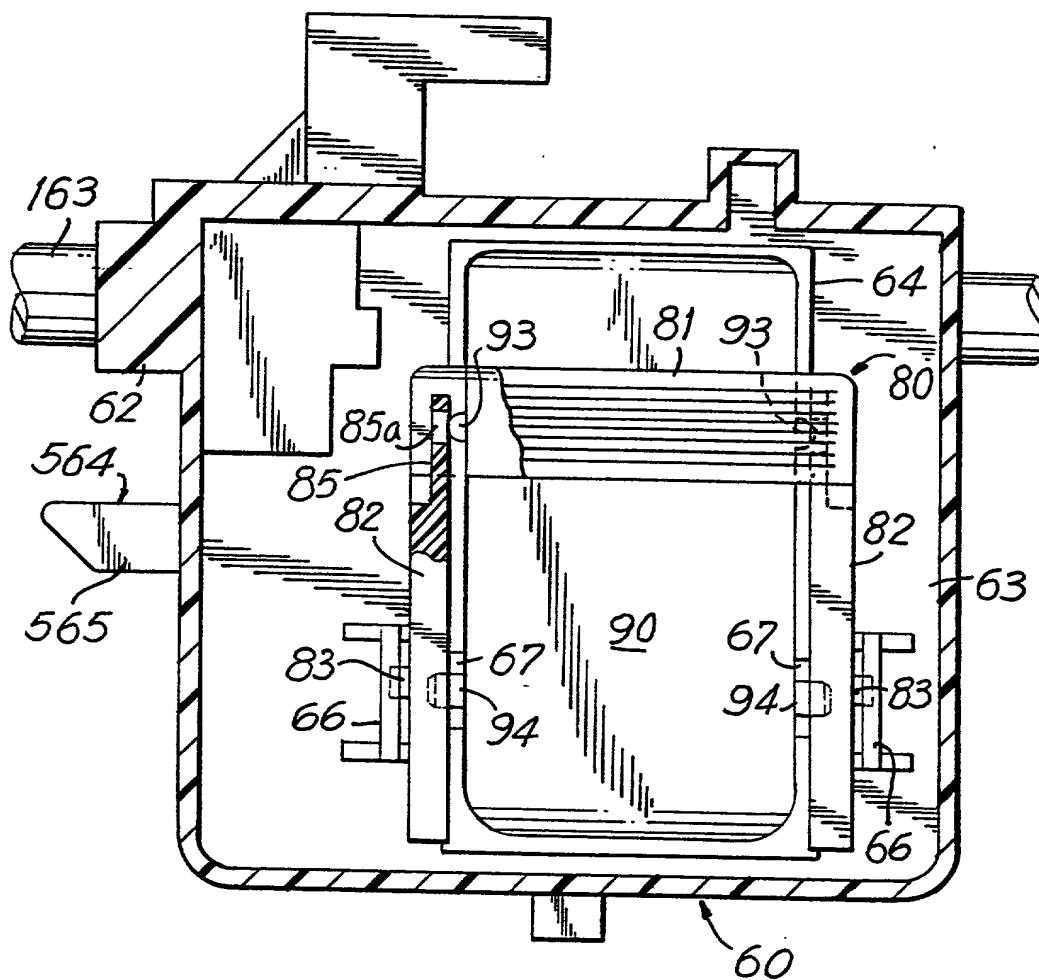
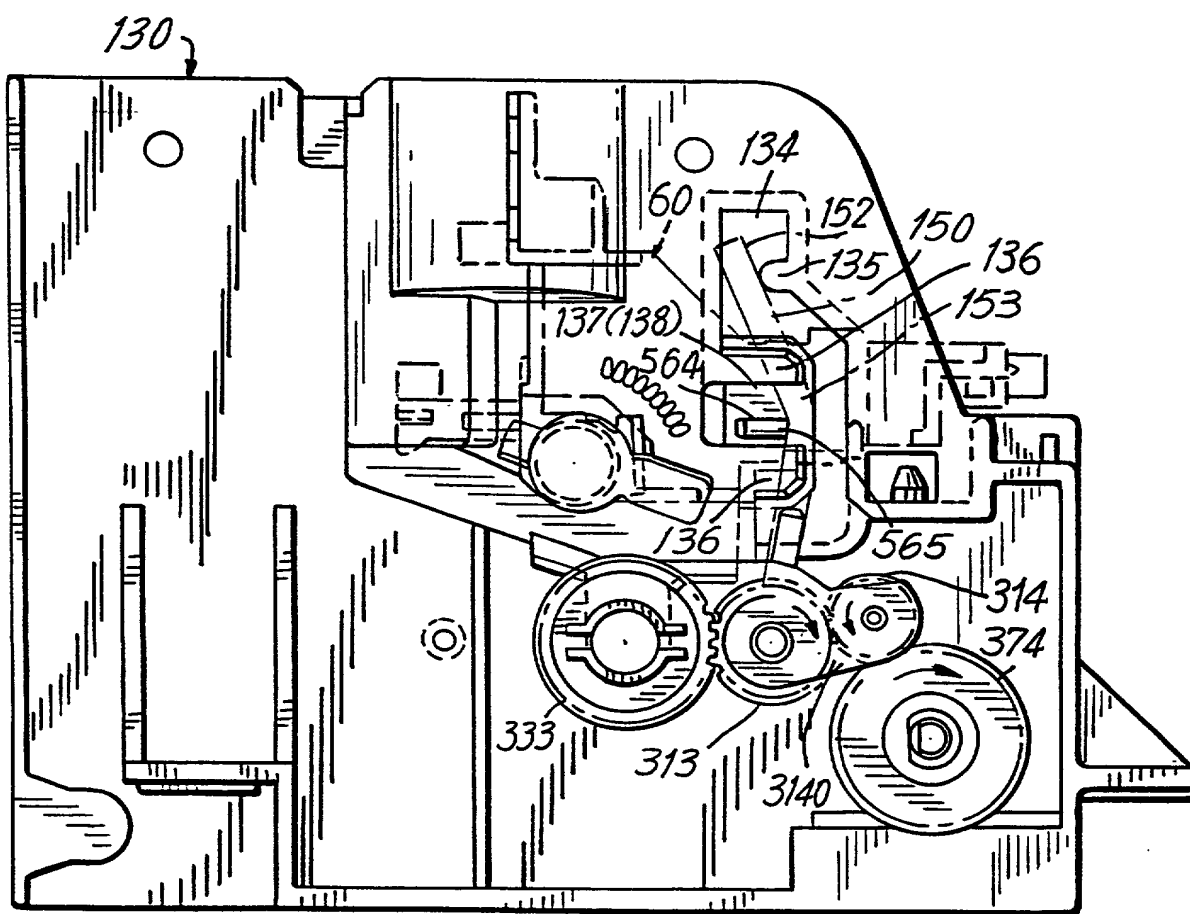


FIG. 23

FIG. 24



```

graph TD
    START([START]) --> ST1[MOVE CARRIAGE TO FEED-IN POSITION]
    ST1 --> ST2[RESET PAPER FEED COUNTER  
(N = 0)]
    ST2 --> ST3[REVERSELY ROTATE PAPER FEED MOTOR]
    ST3 --> ST4[INCREMENT PAPER FEED COUNTER  
(N = N + 1)]
    ST4 --> ST5{PAPER DETECTED?}
    ST5 -- YES --> ST6[REVERSELY ROTATE PAPER FEED MOTOR BY 120 STEPS]
    ST5 -- NO --> ST10{N ≥ 1000}
    ST6 --> ST7[MOVE CARRIAGE TO STANDBY POSITION]
    ST7 --> ST8[FORWARDLY ROTATE PAPER D MOTOR BY 610 STEPS]
    ST8 --> ST9([WAIT FOR PRINT SIGNAL])
    ST9 --> ST2
    ST10 -- YES --> ST11([NO PAPER])
    ST10 -- NO --> ST3
  
```

FIG.25

FIG. 25

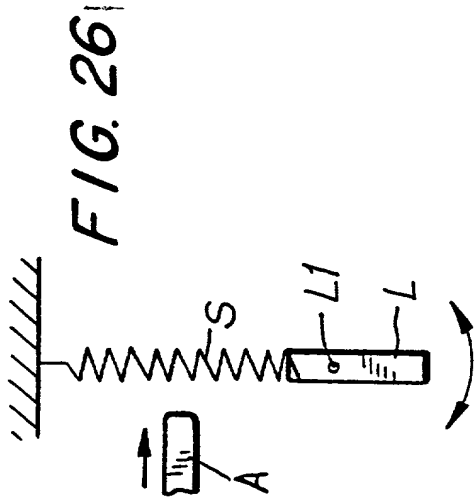


FIG. 26

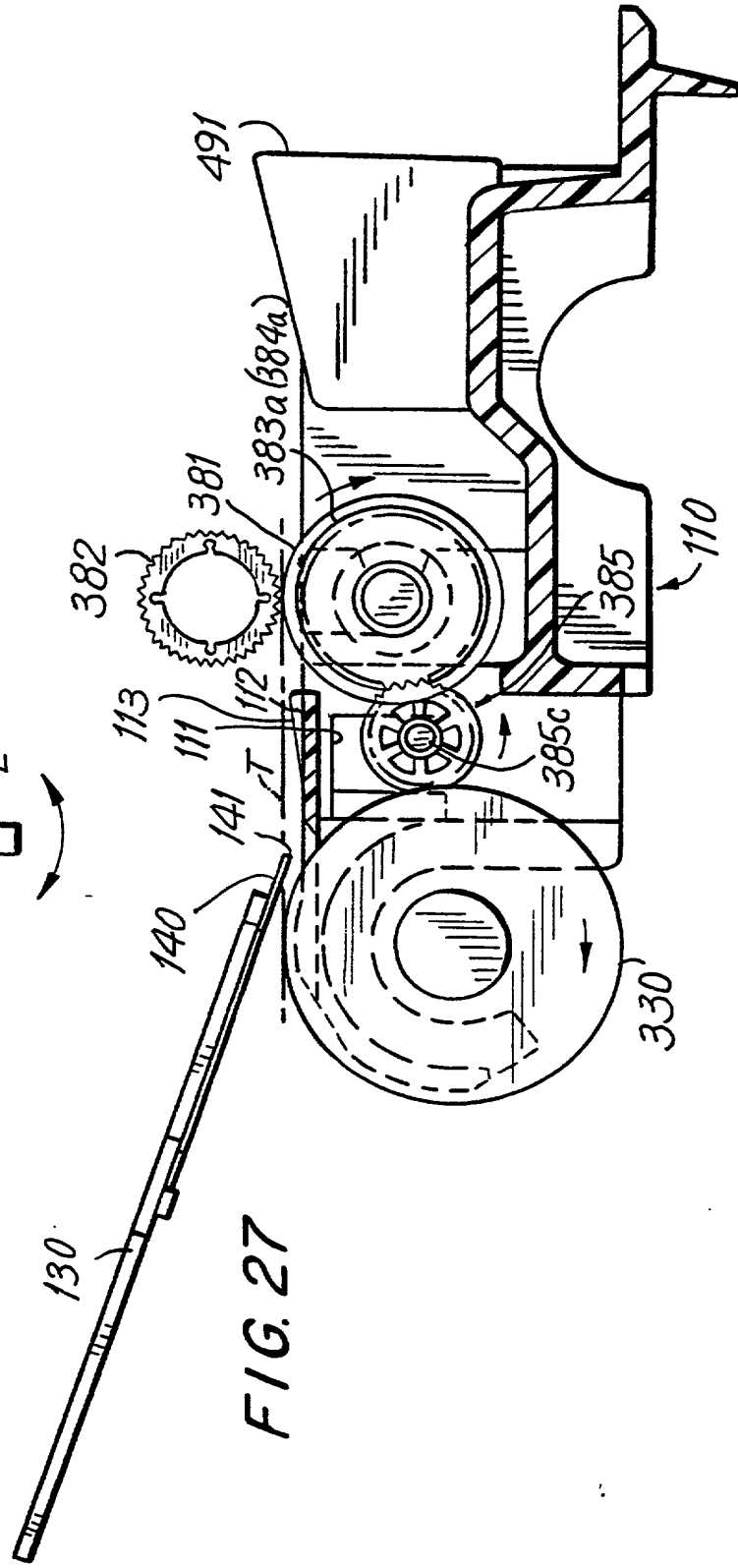


FIG. 27

FIG. 28

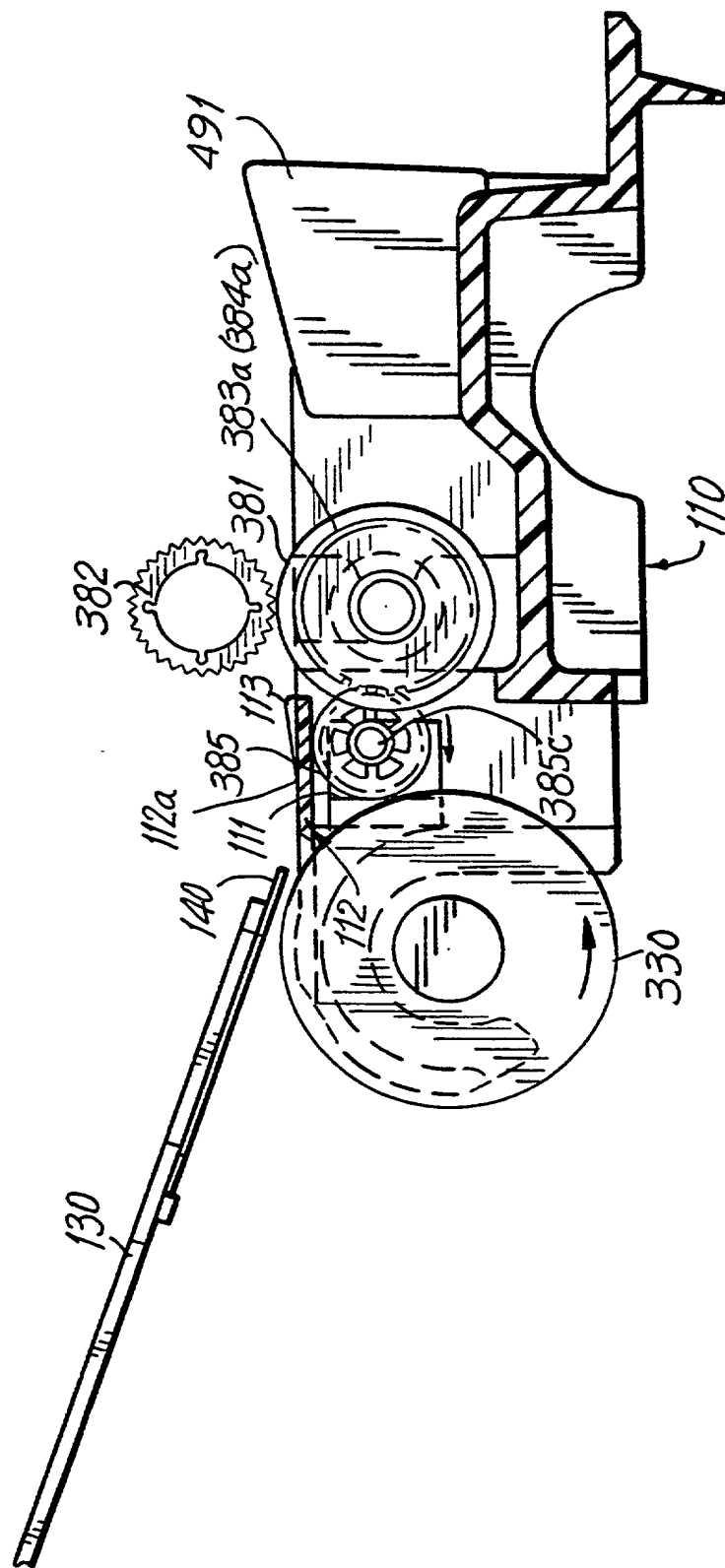


FIG. 29

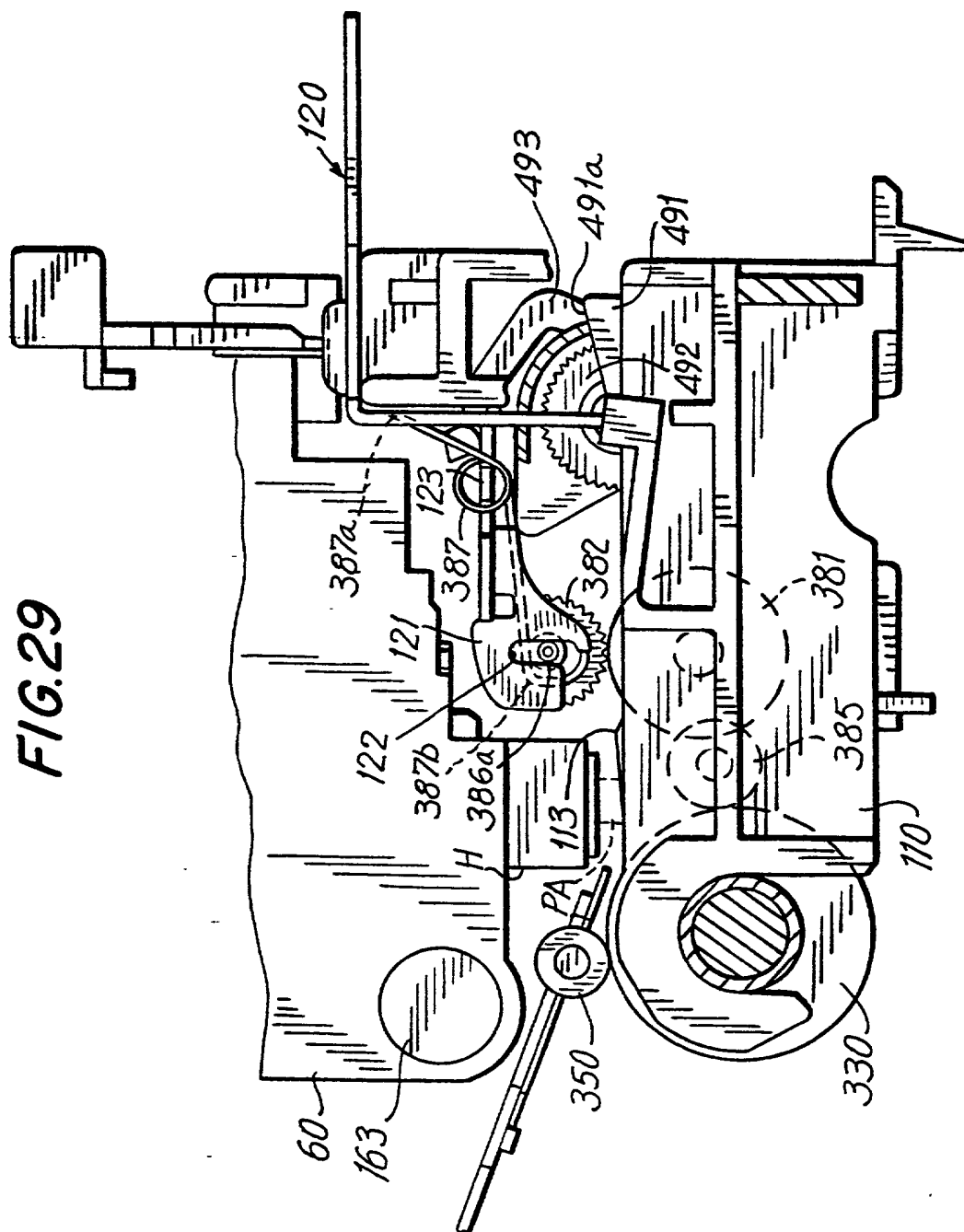
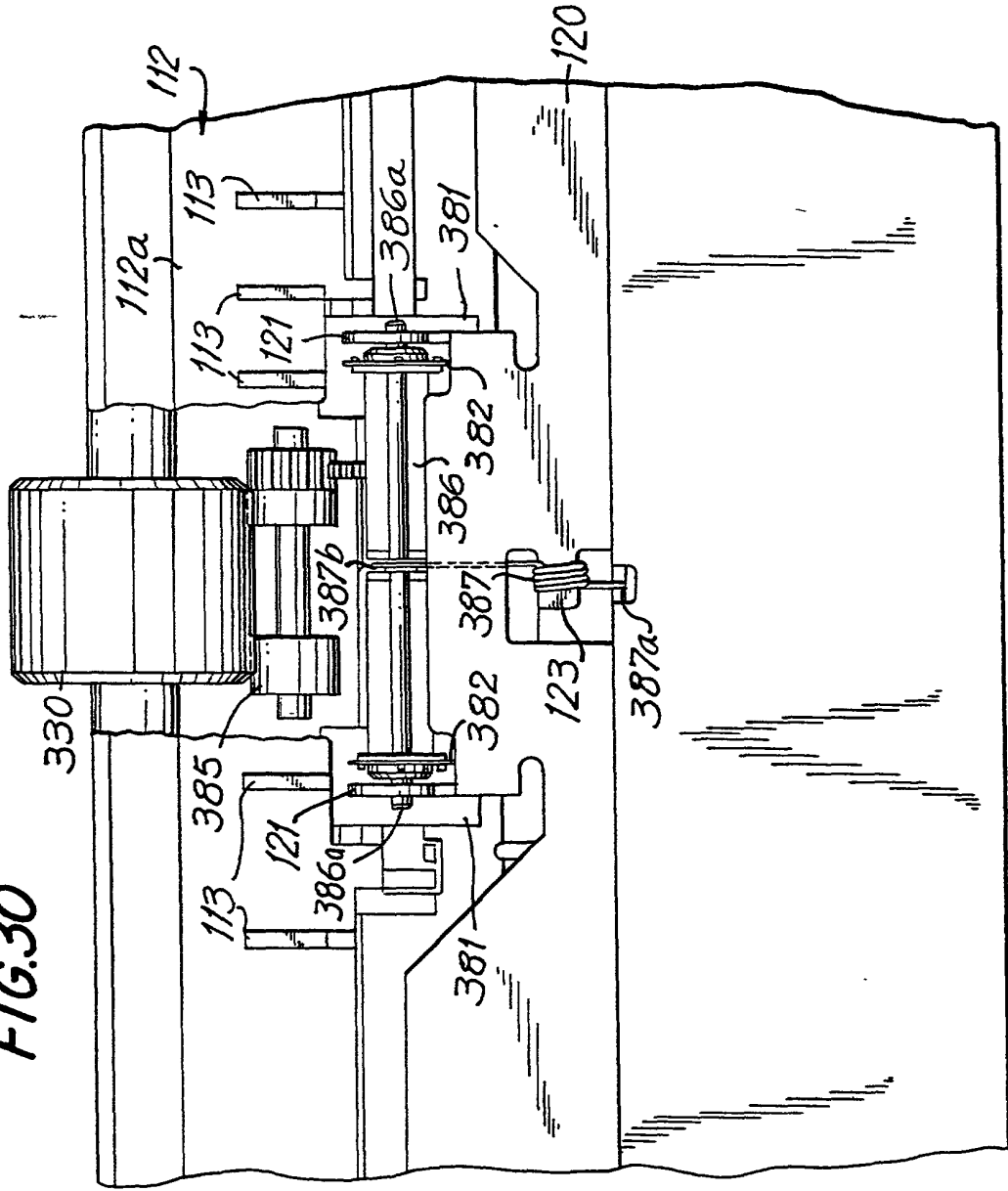


FIG.30



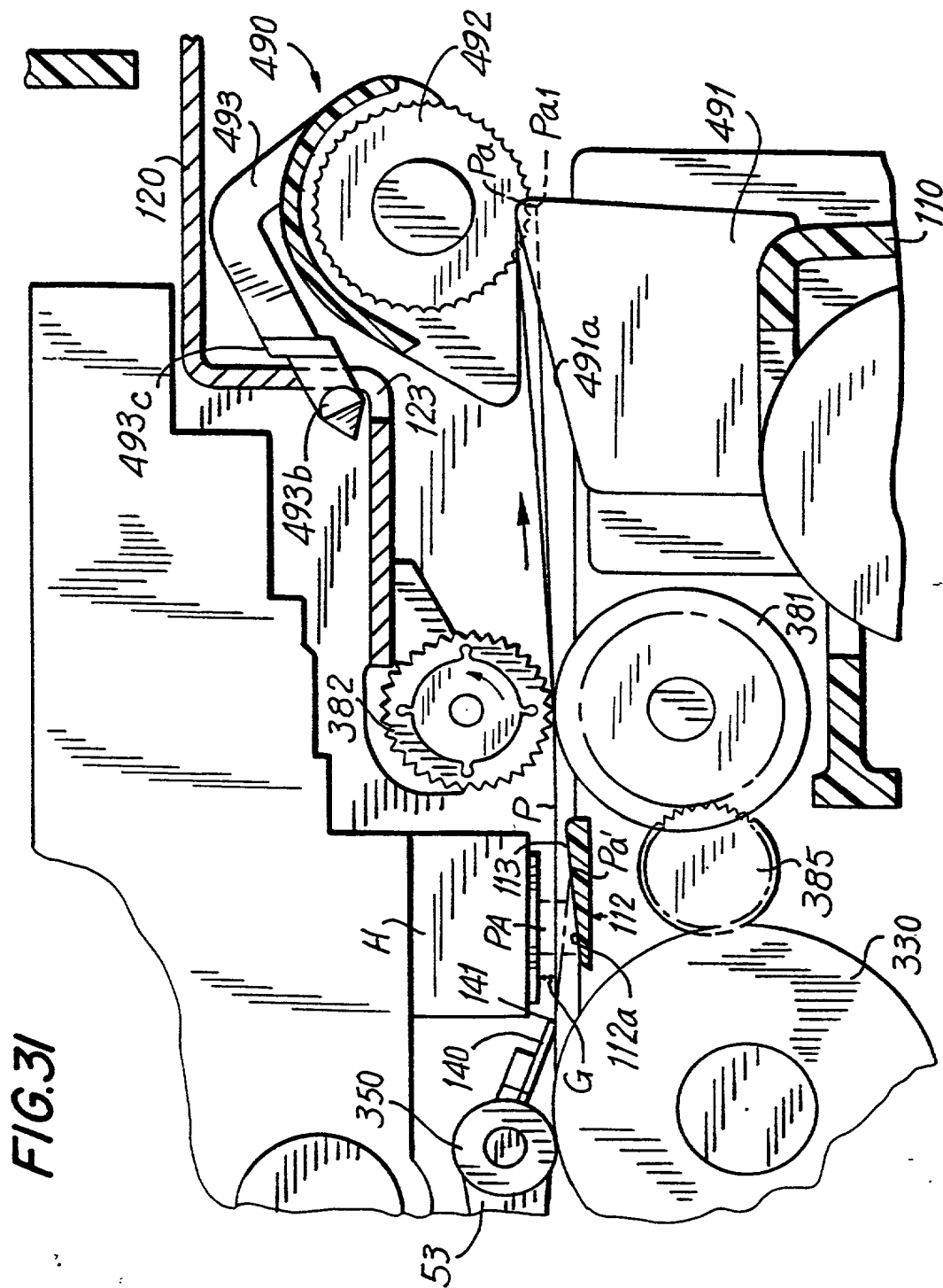


FIG. 32

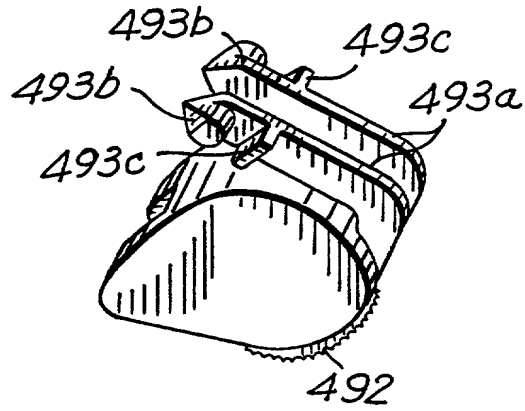


FIG. 33

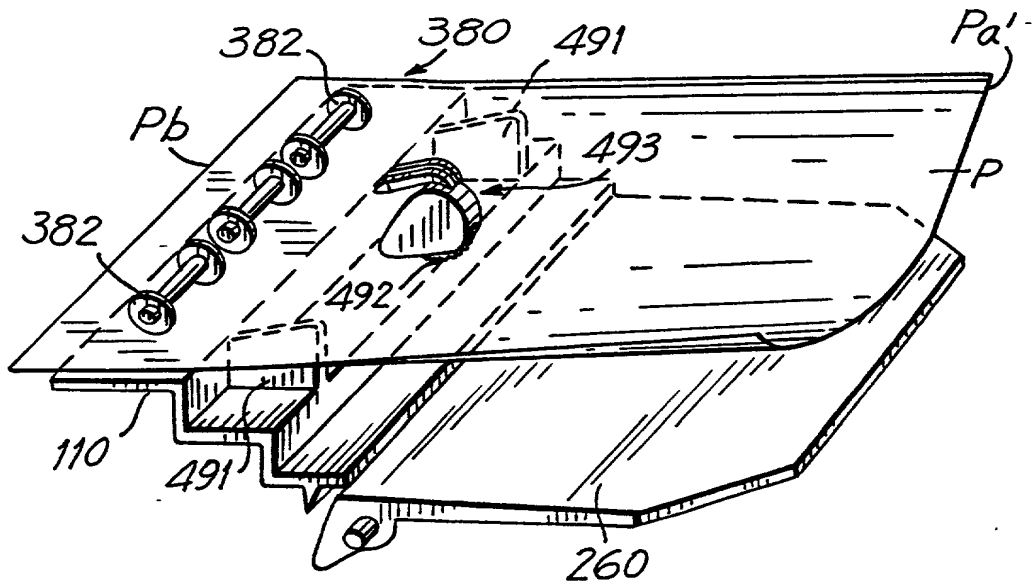


FIG.34

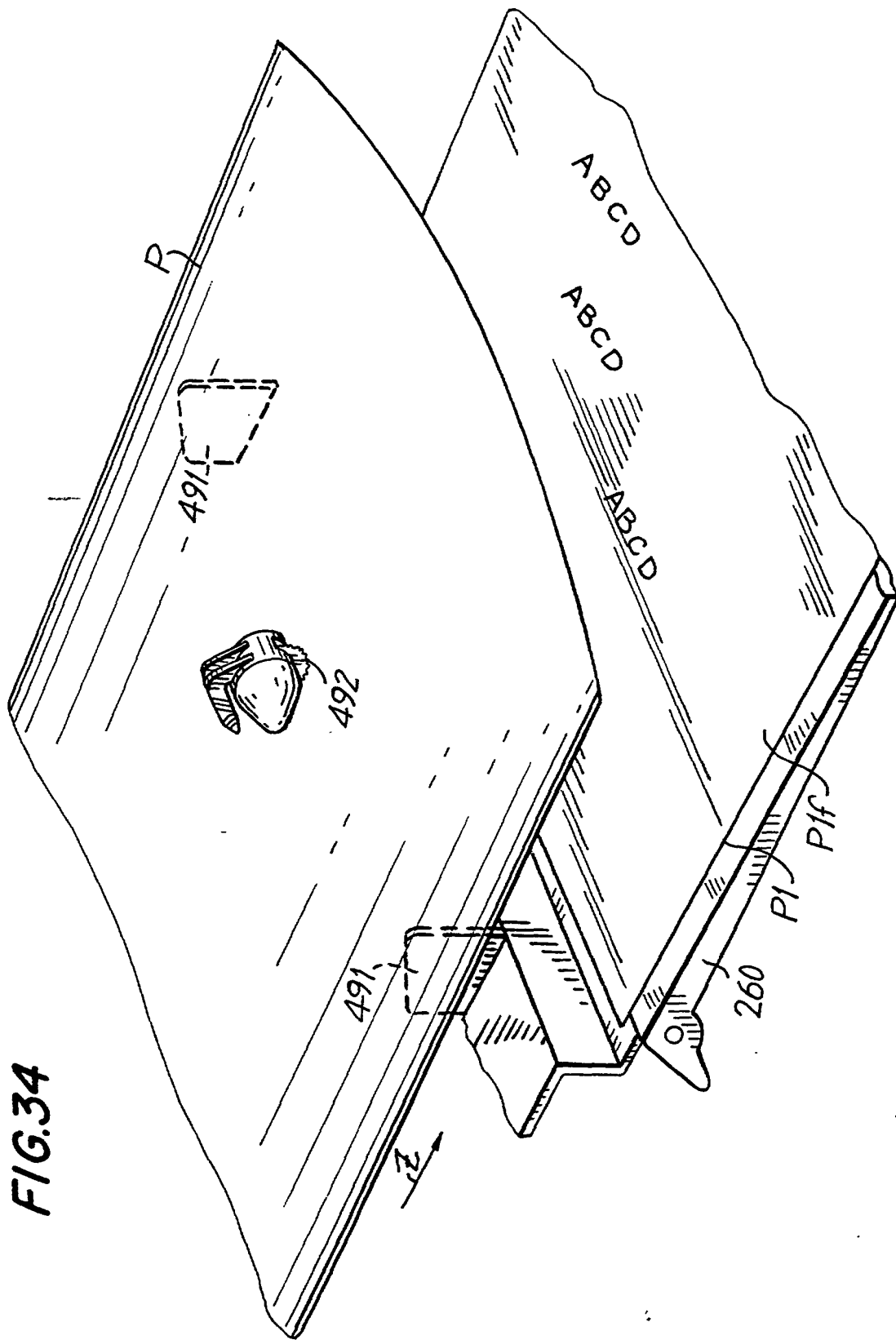


FIG.35

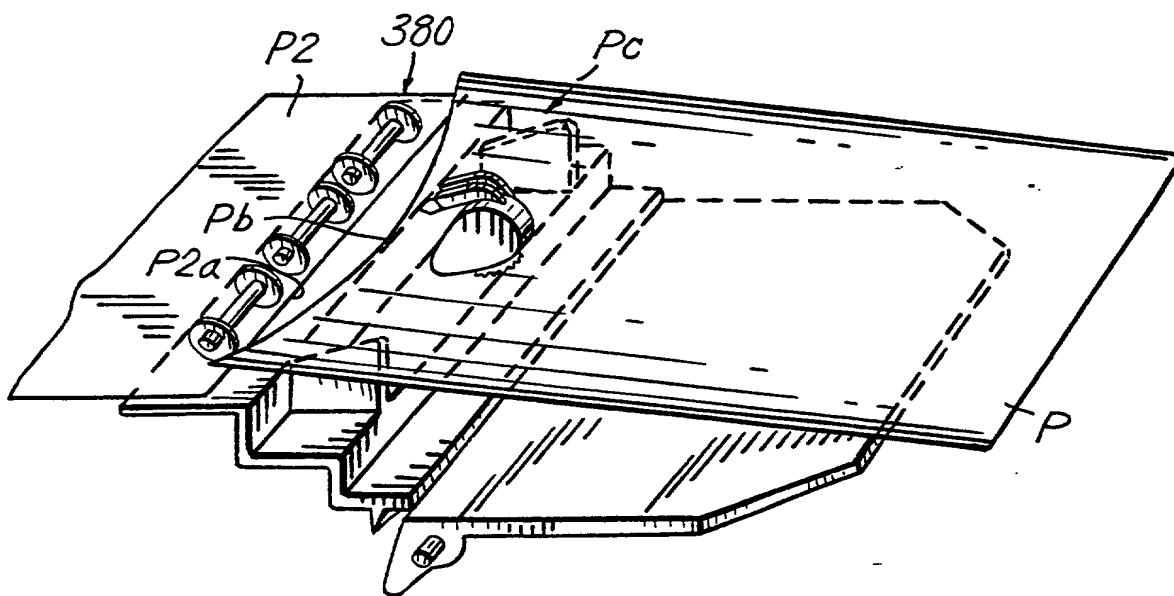


FIG.36

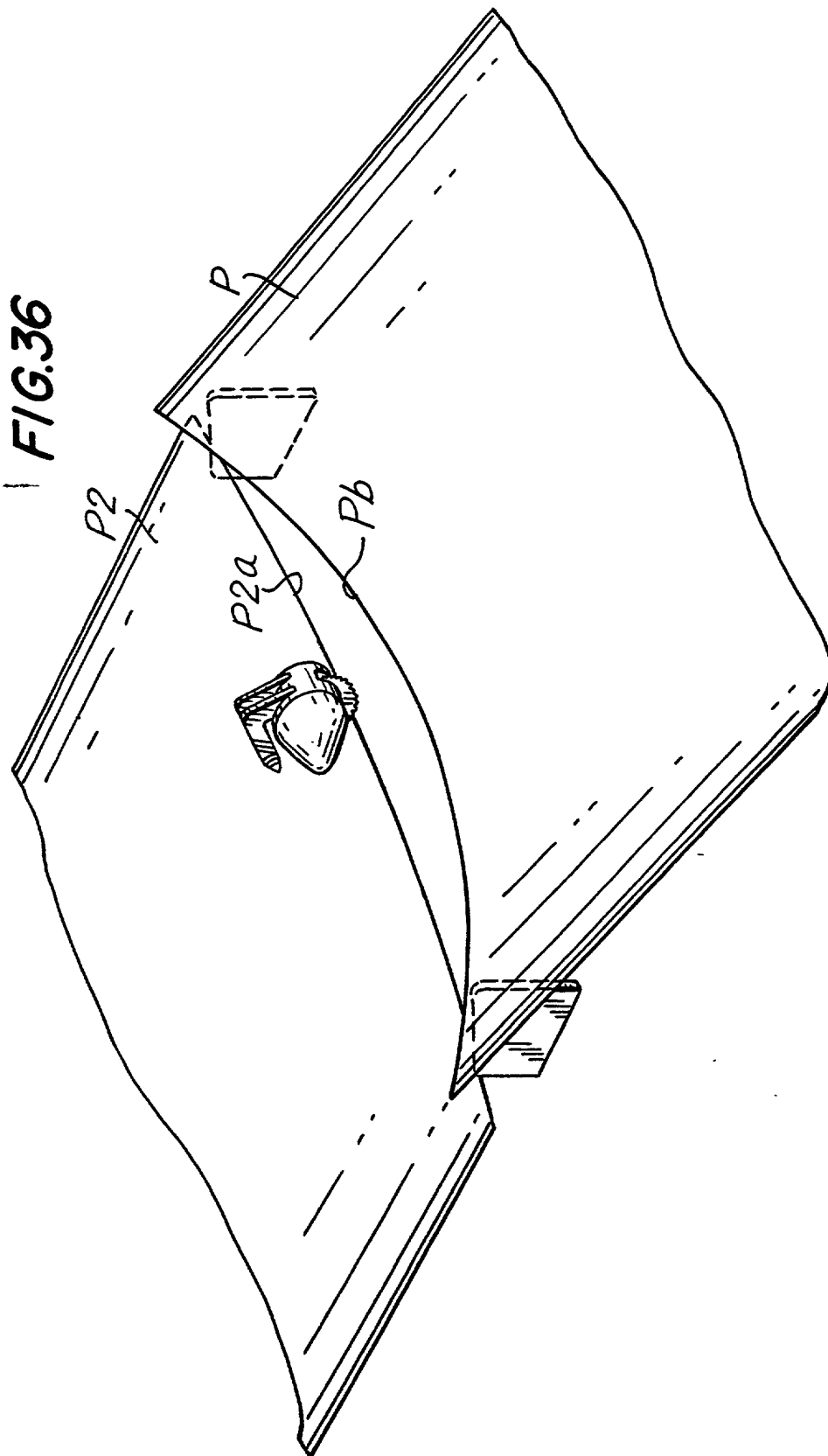


FIG.37

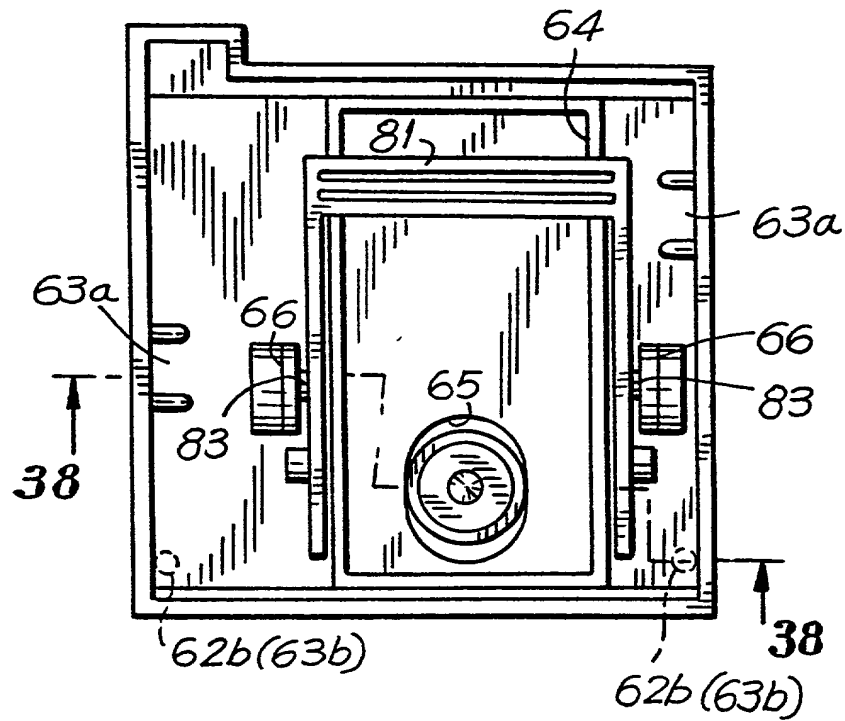


FIG.38

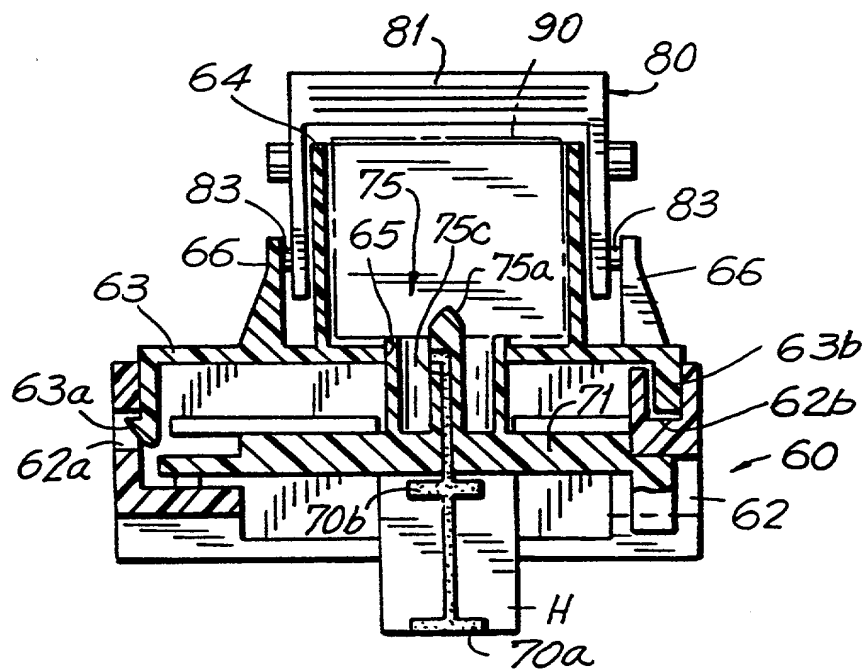


FIG.39

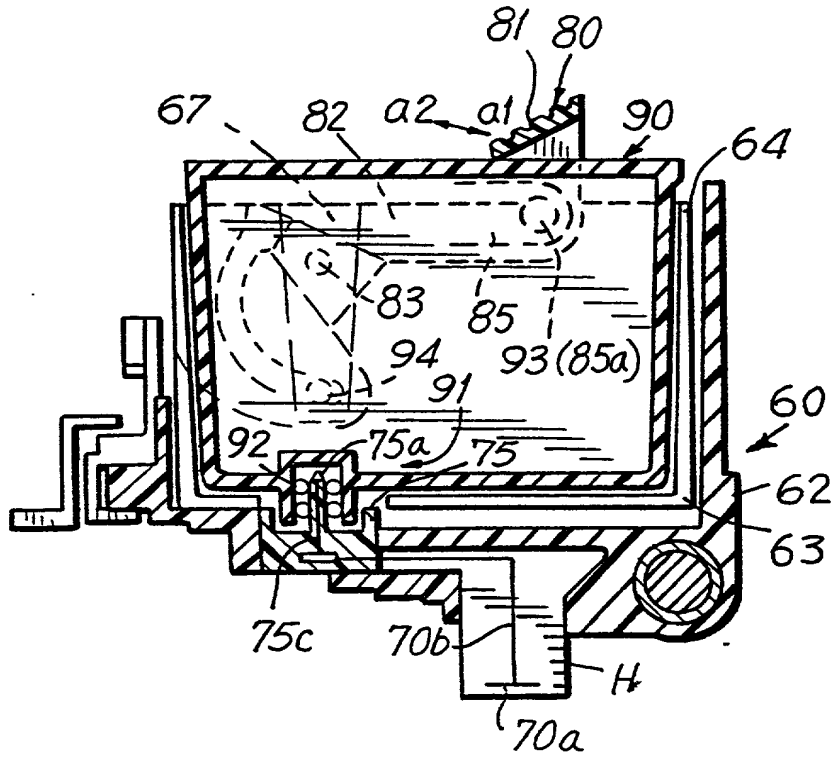


FIG.40

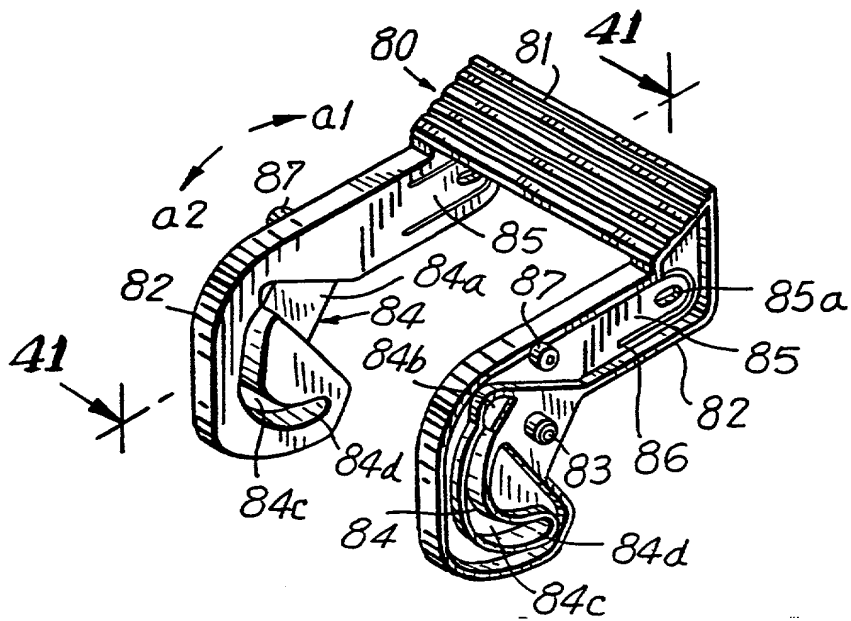


FIG. 41

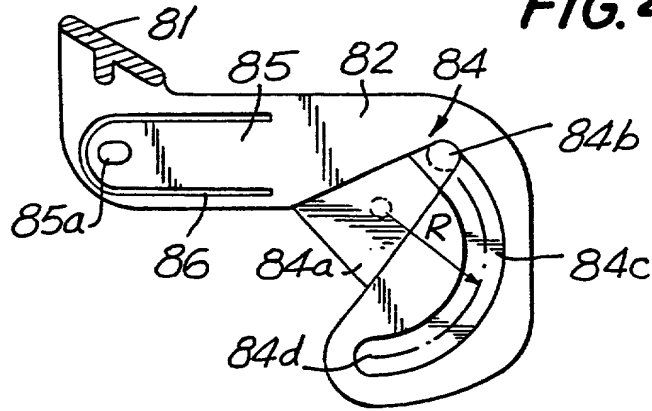
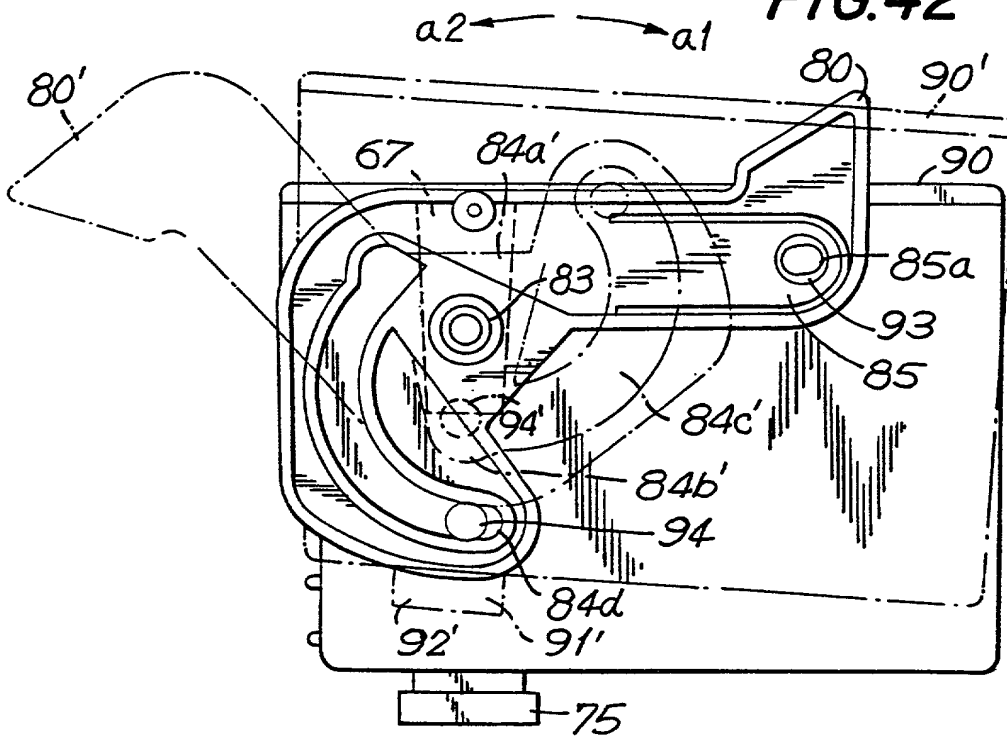


FIG. 42



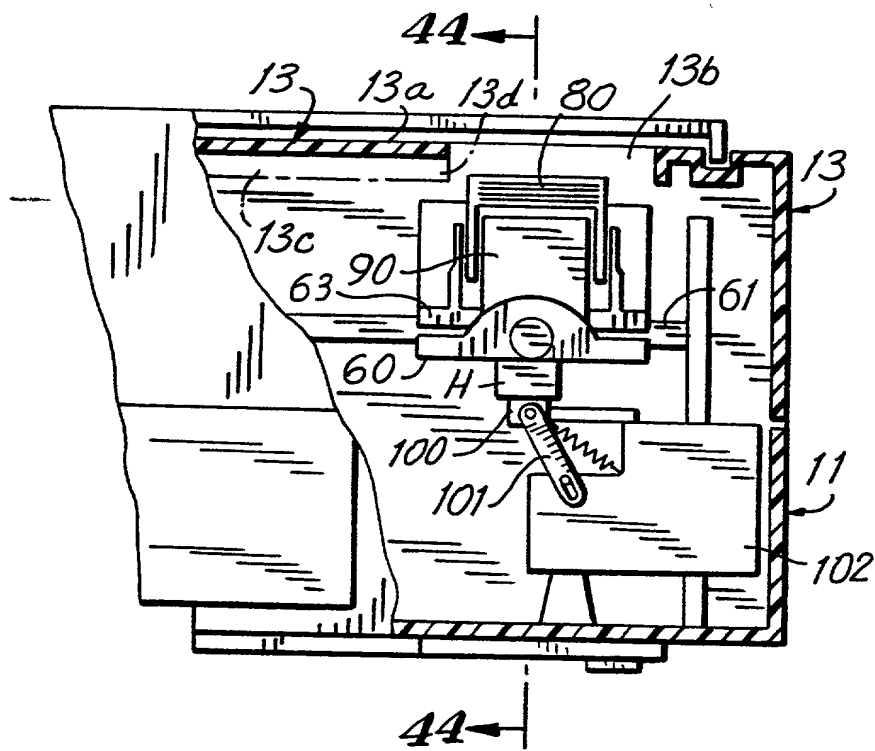


FIG.43

FIG. 44

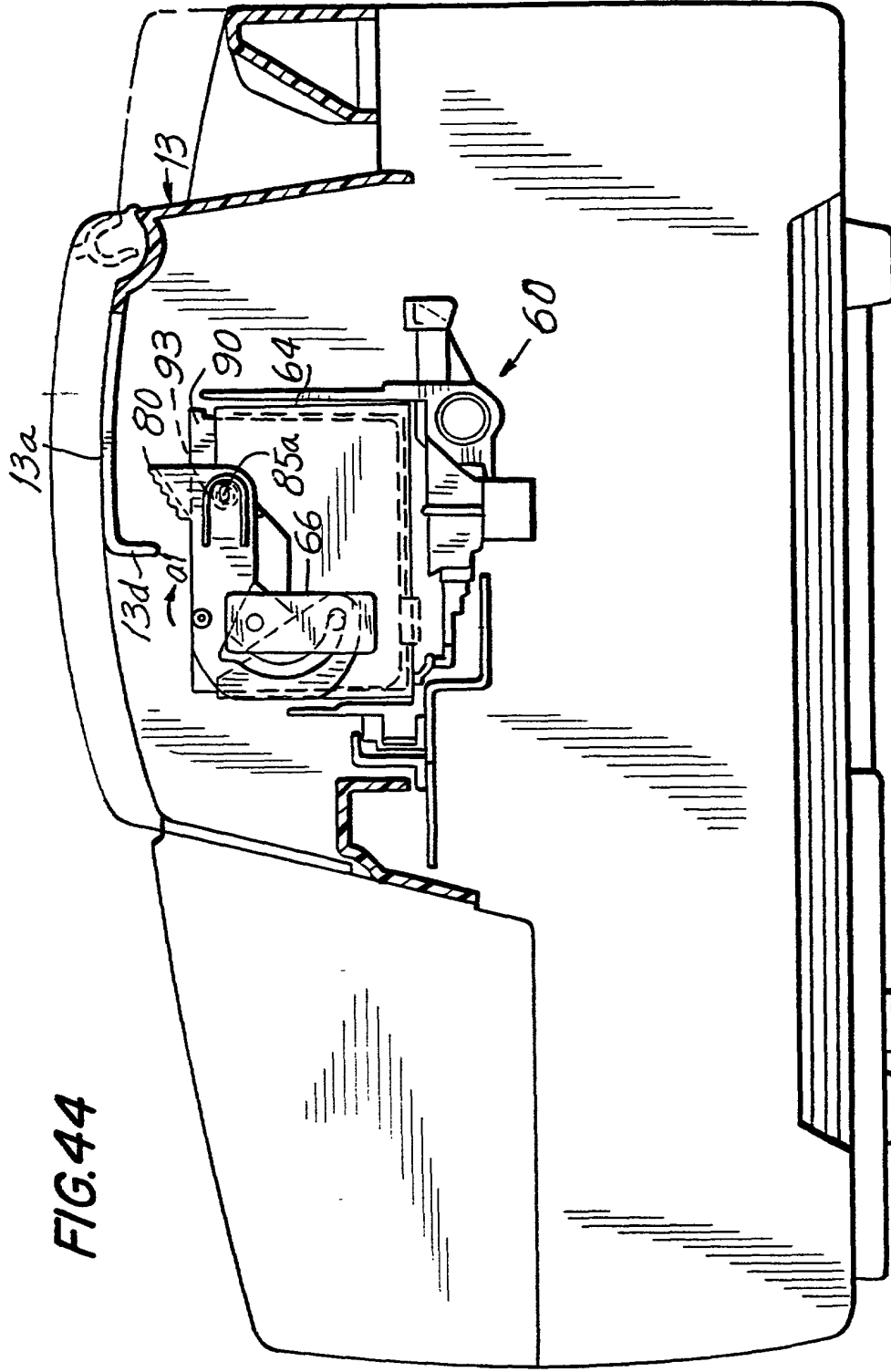


FIG.45

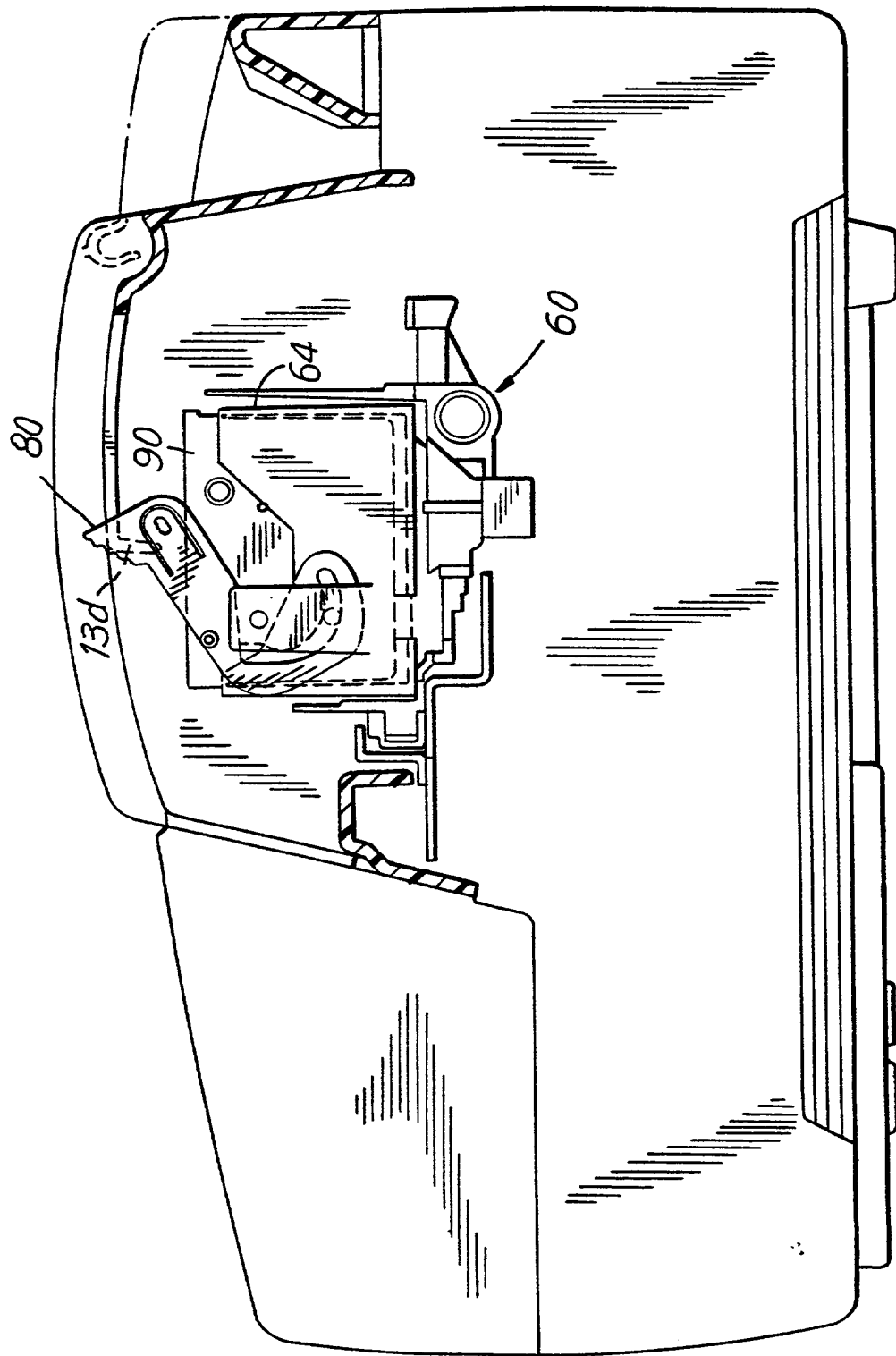


FIG.46

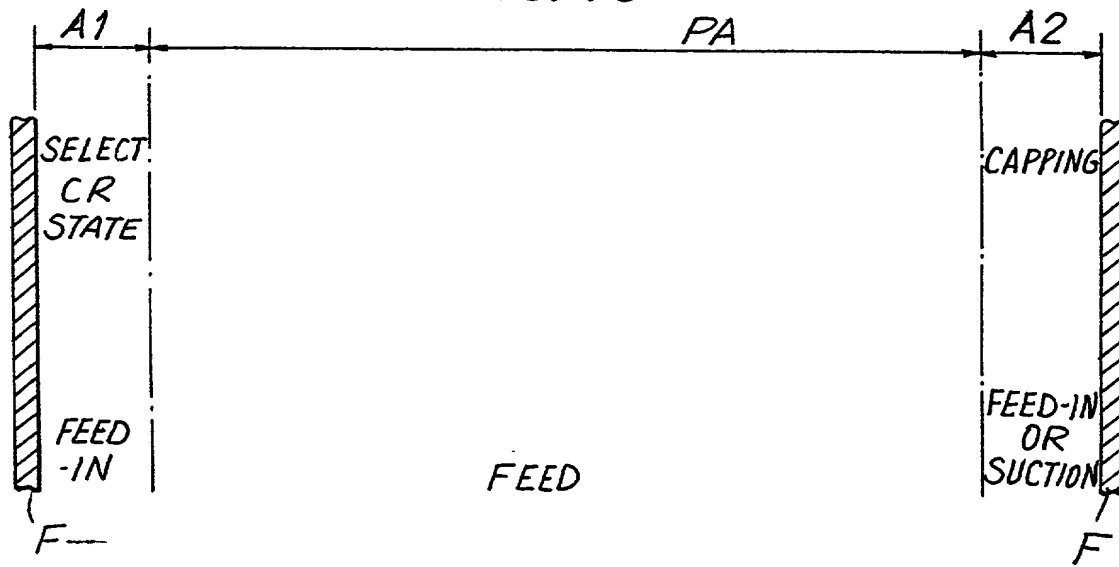


FIG.50

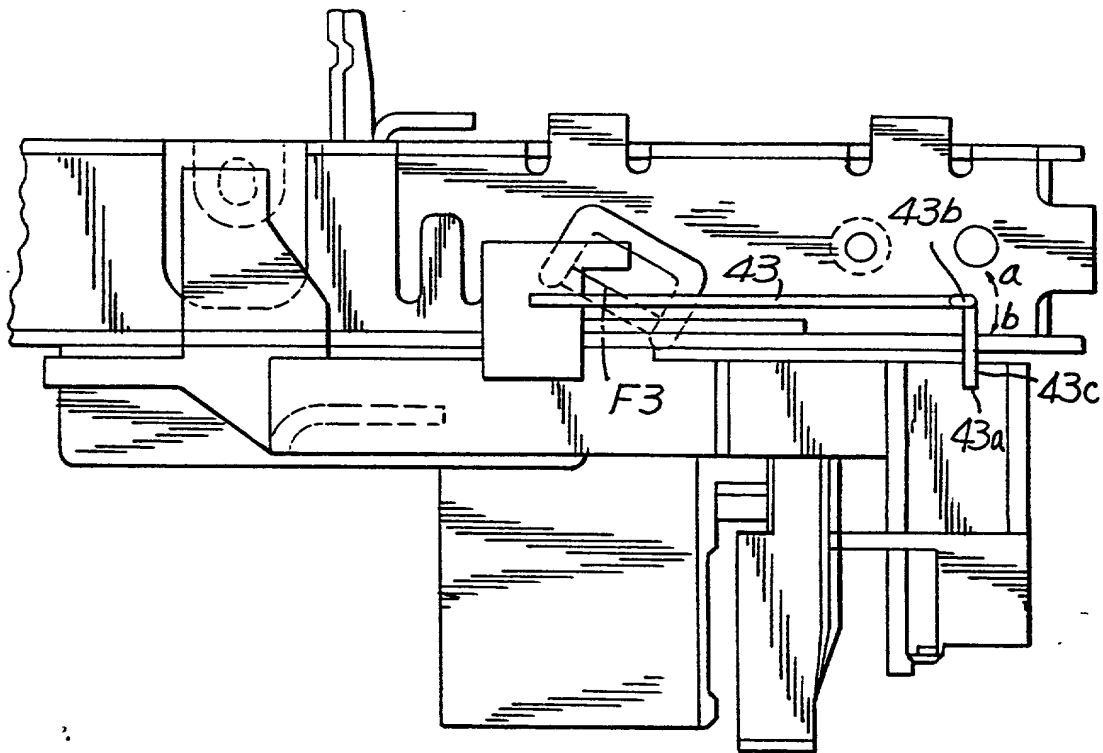


FIG. 47

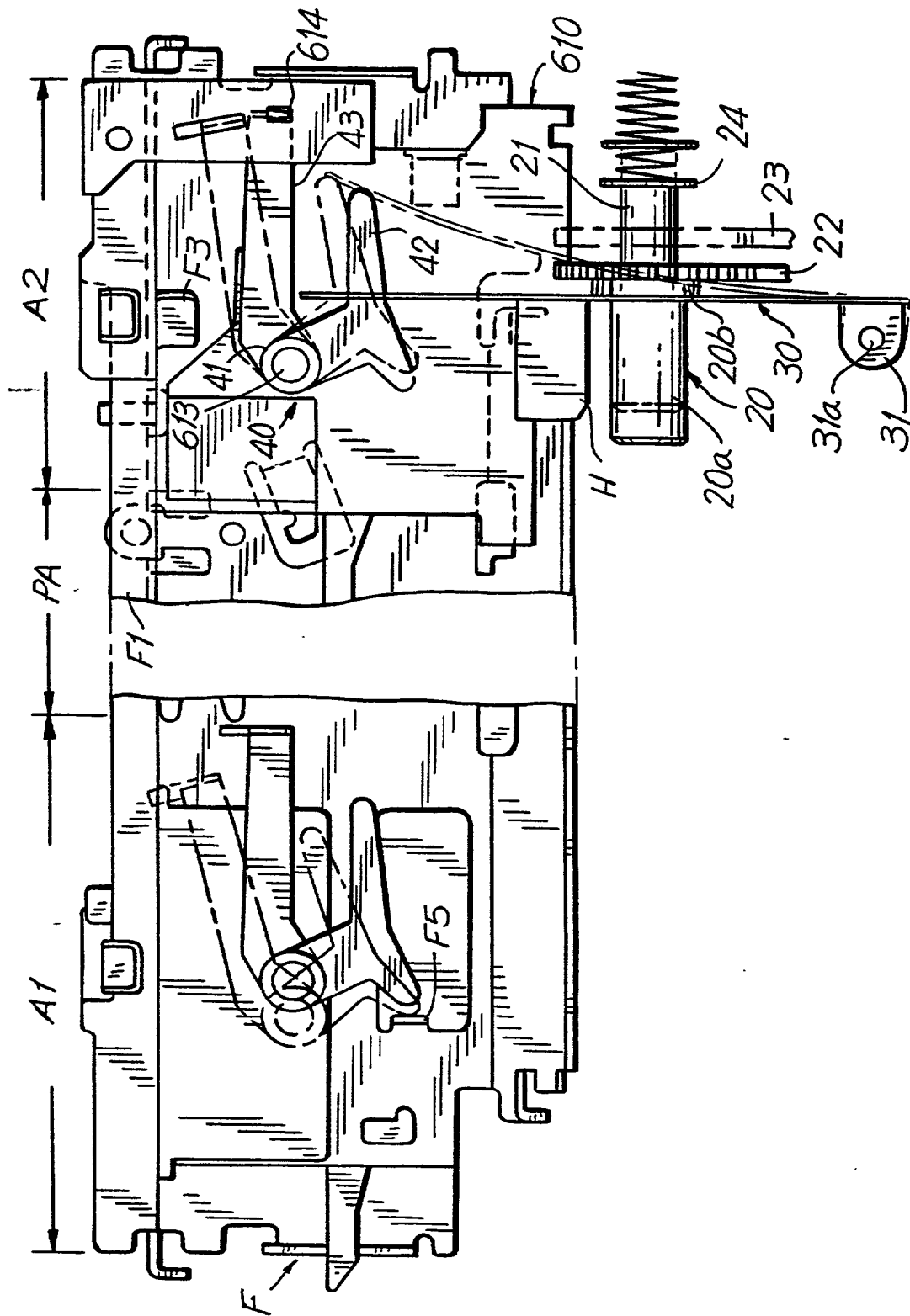


FIG. 48

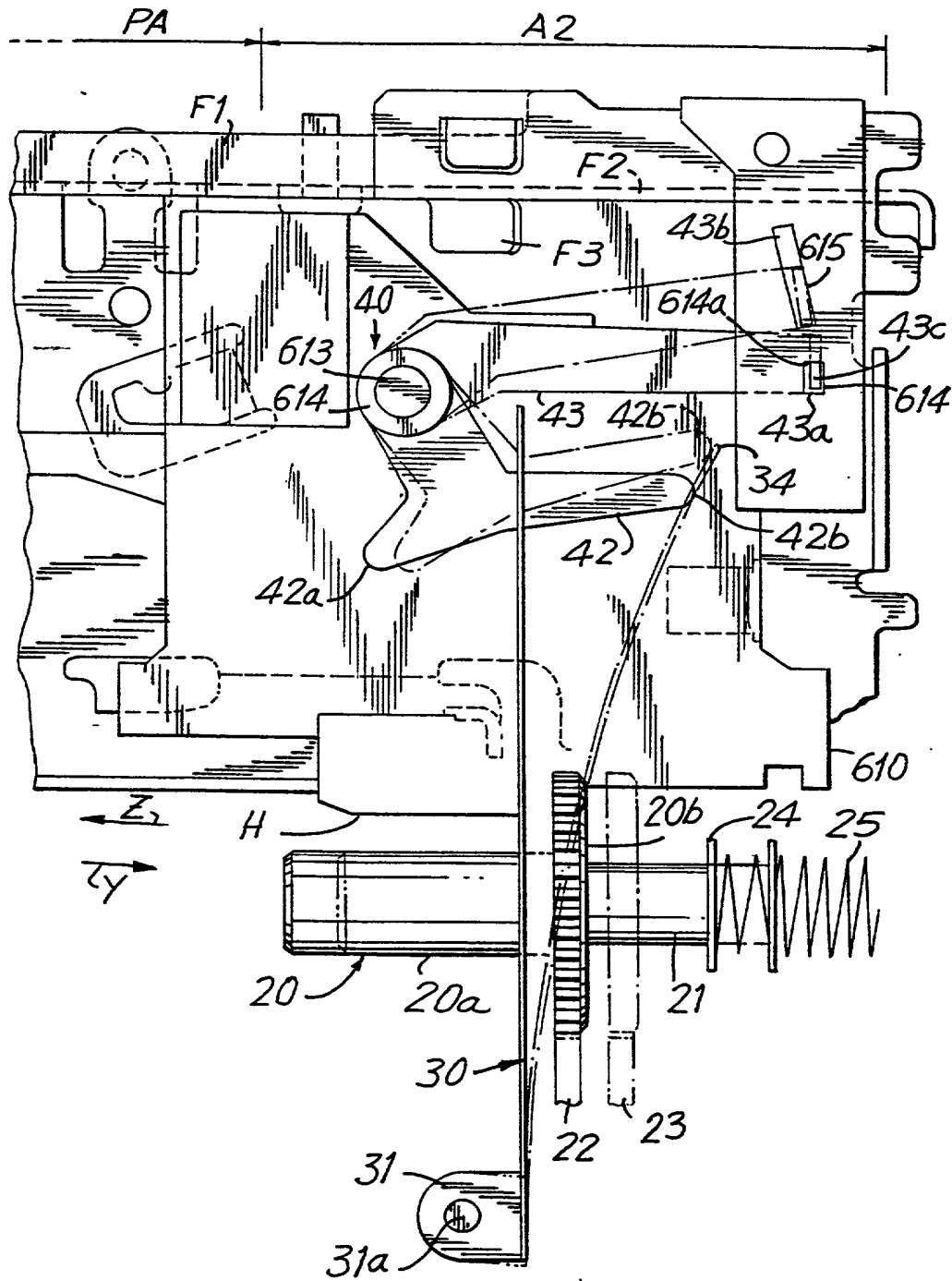
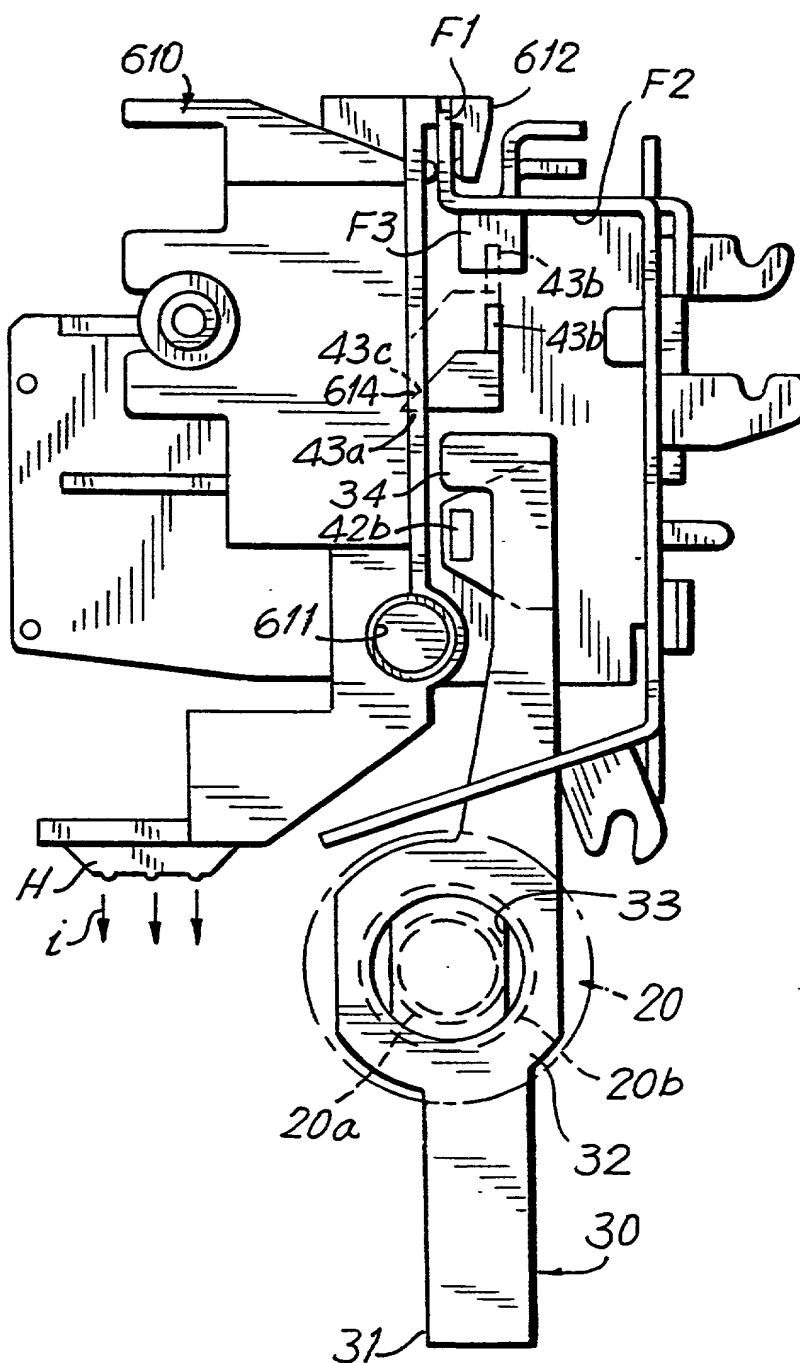


FIG. 49



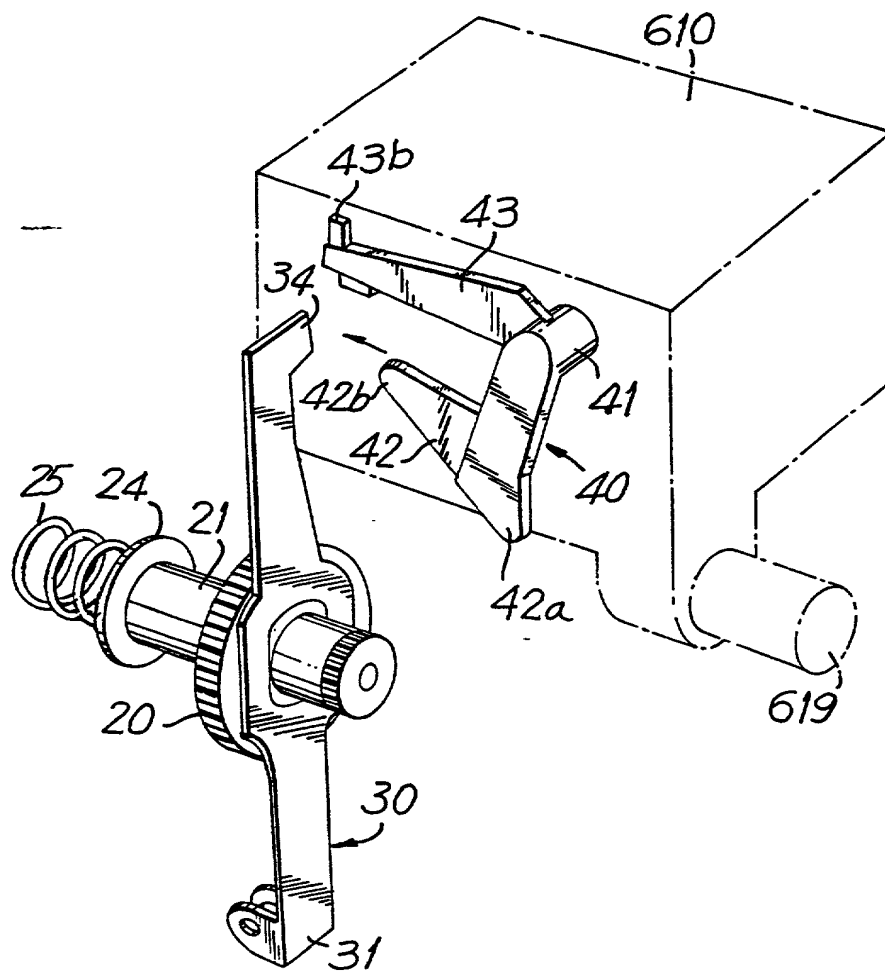


FIG. 51

FIG.52

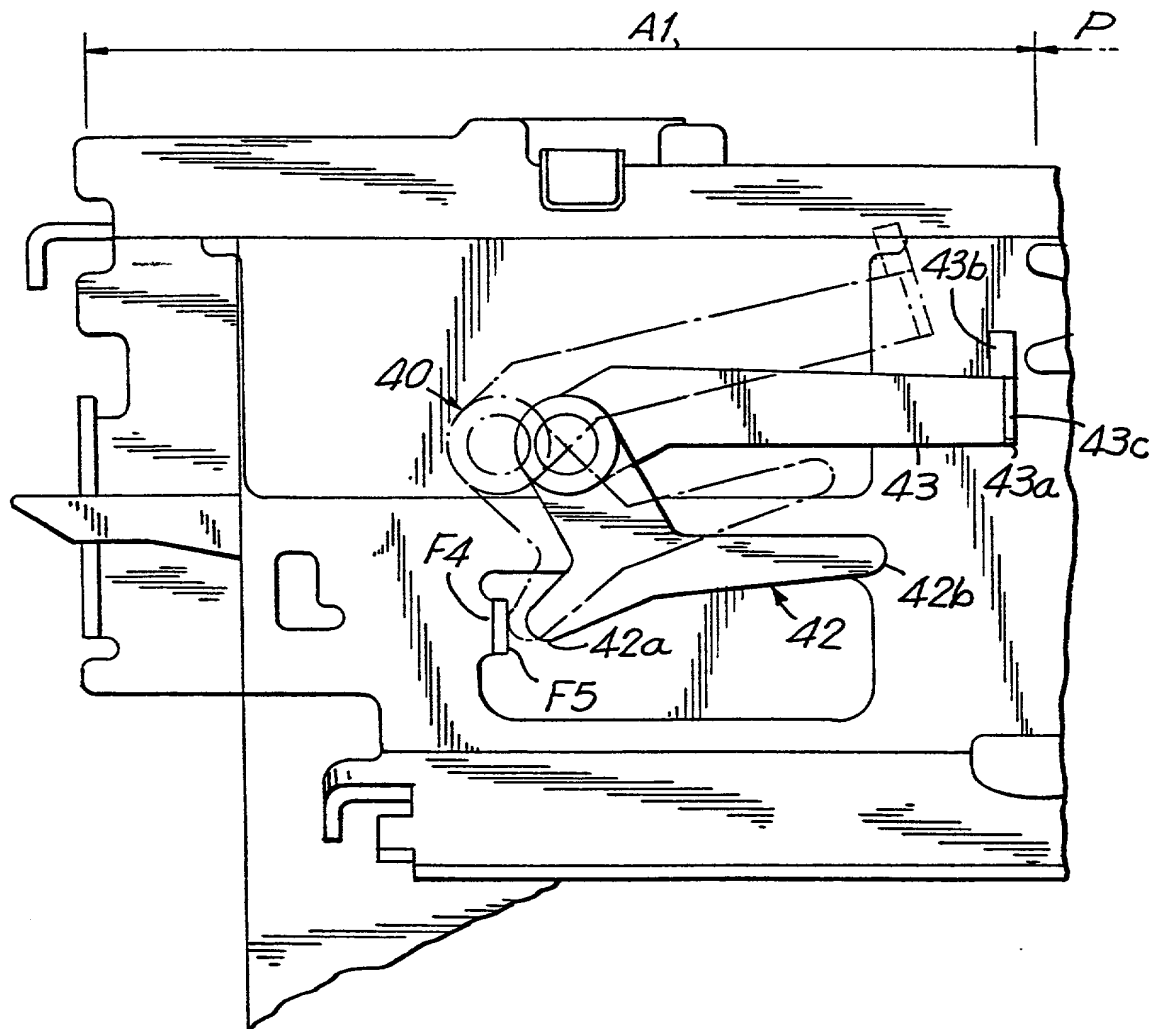
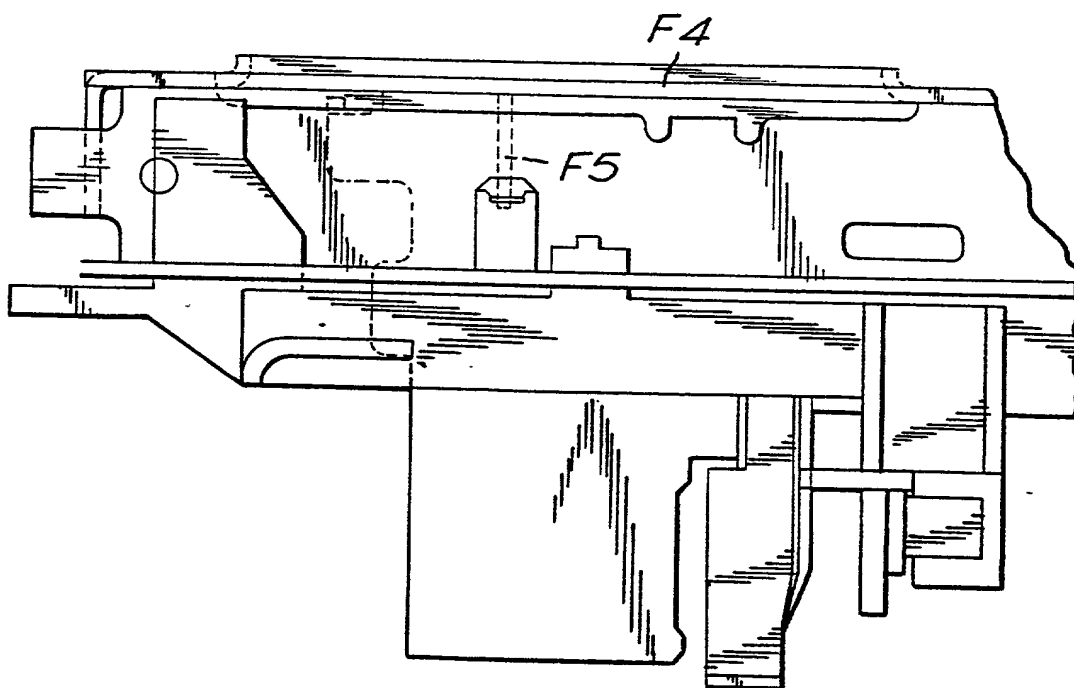
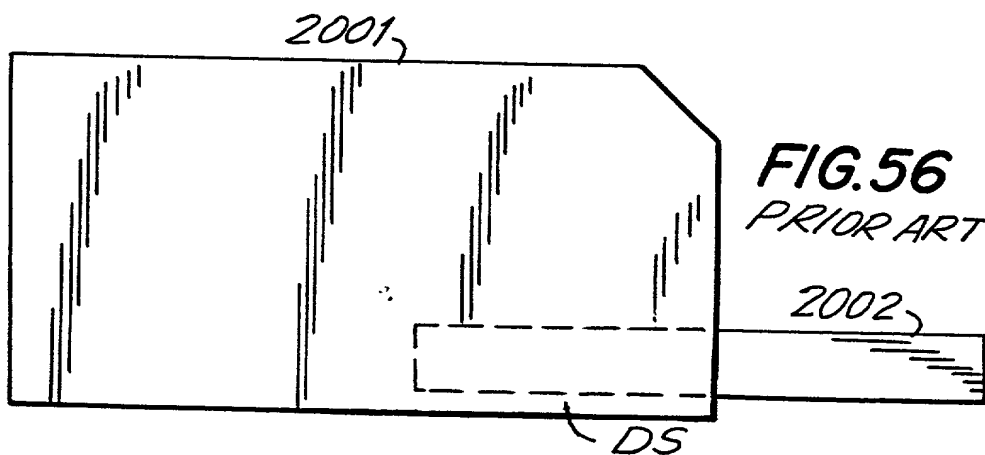
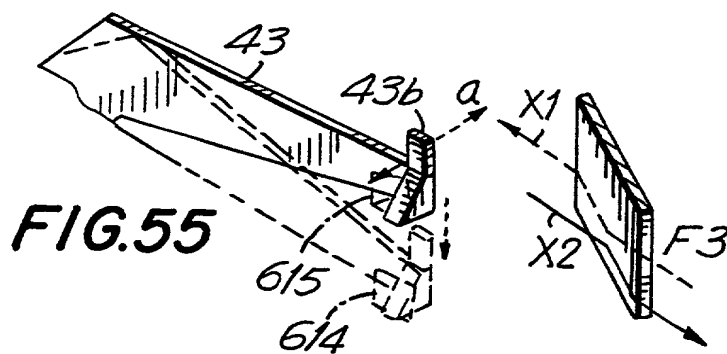
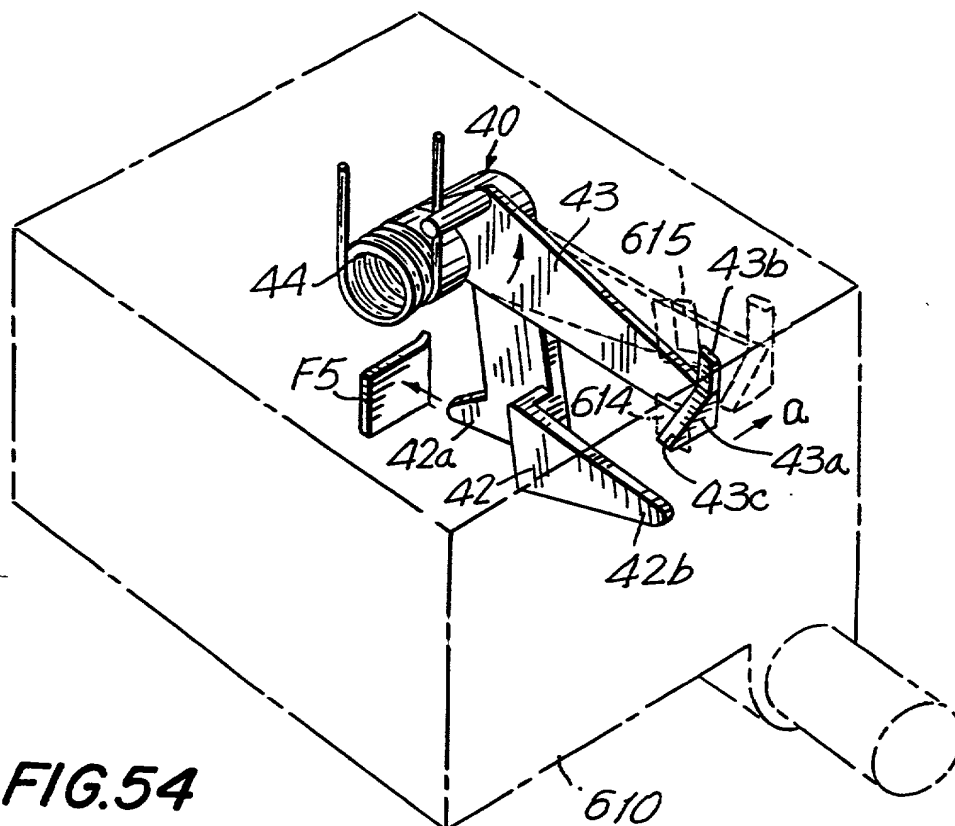


FIG. 53

FIG. 53





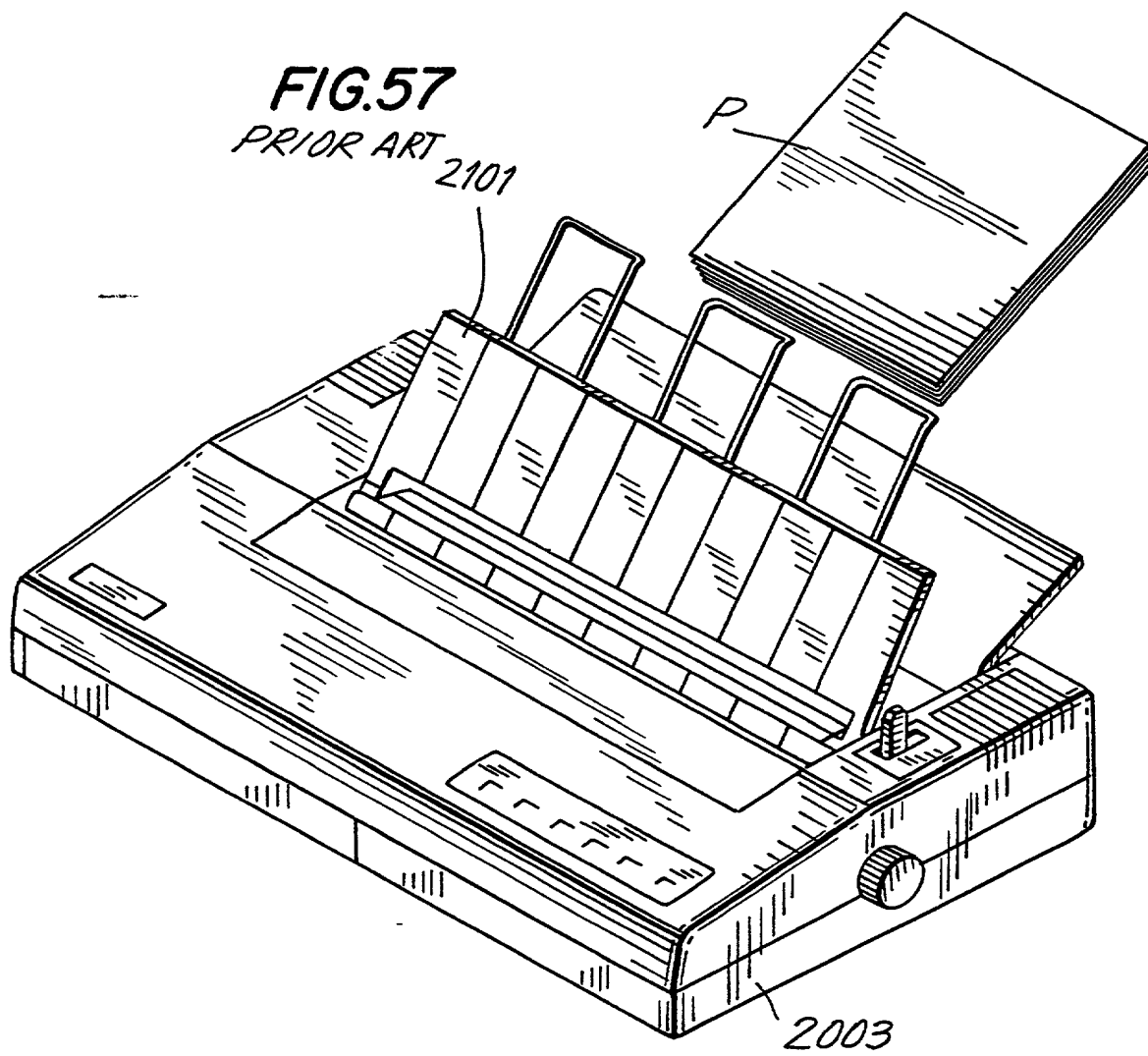


FIG.58
 PRIOR ART

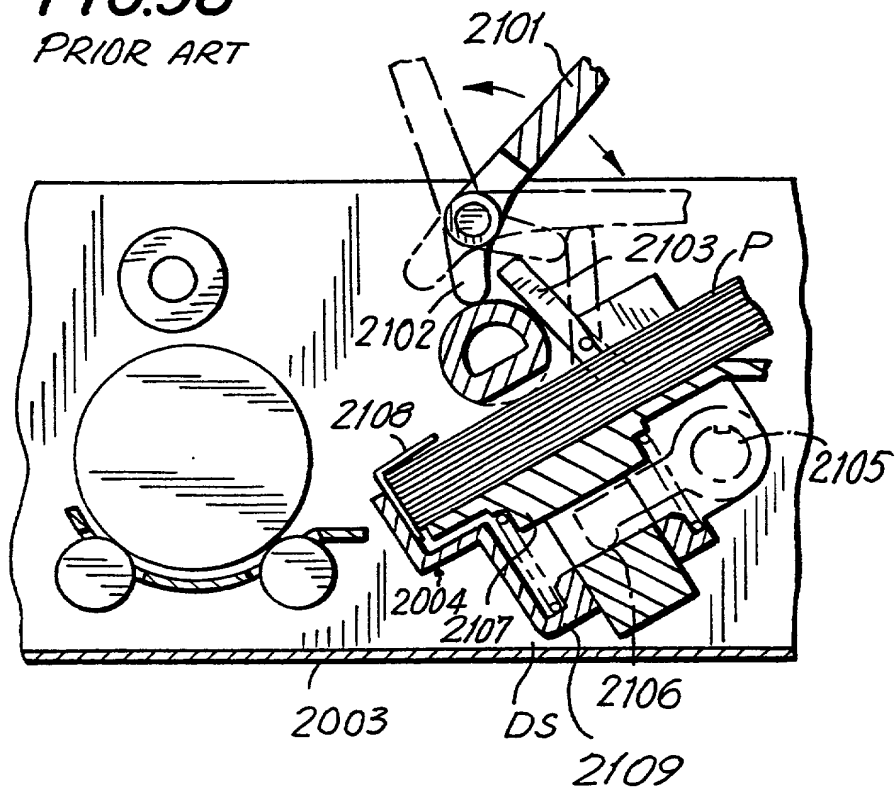


FIG.59
 PRIOR ART

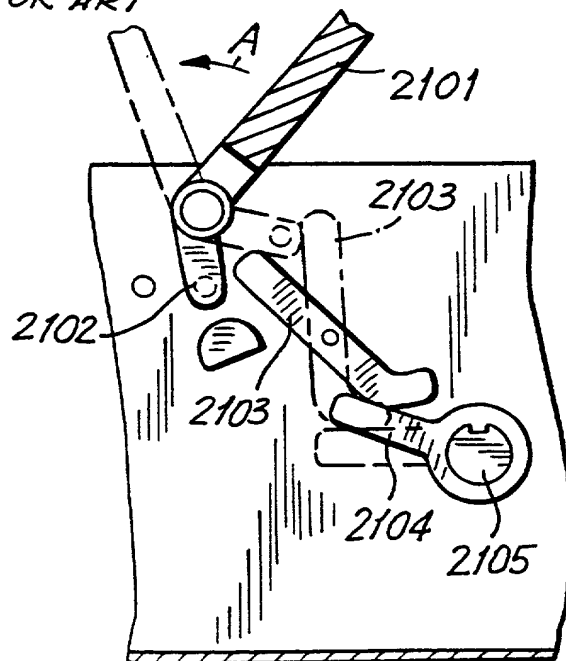


FIG.60
PRIOR ART

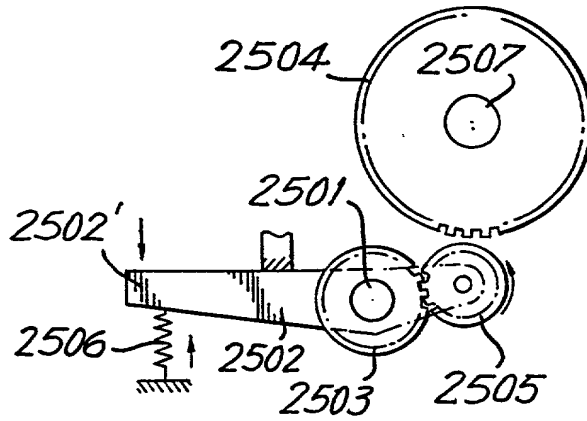


FIG.61
PRIOR ART

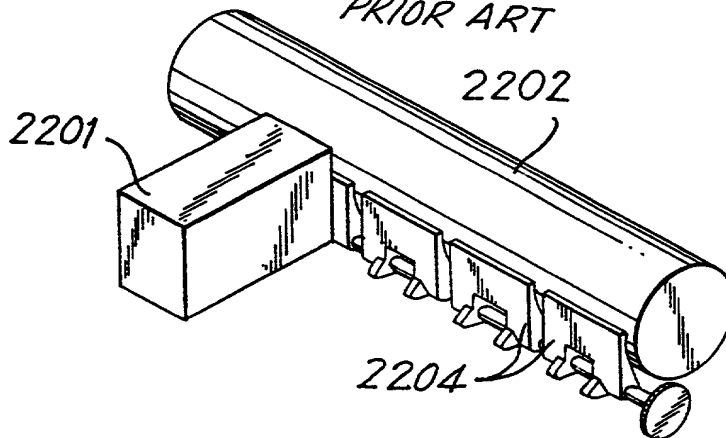


FIG.62
PRIOR ART

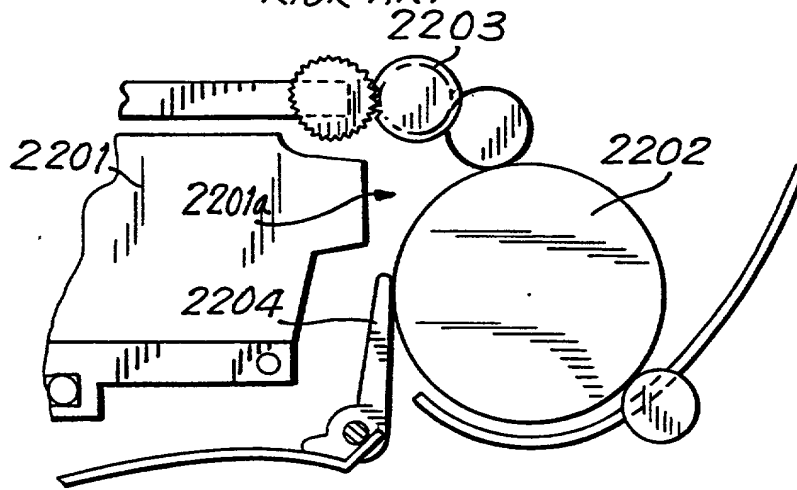
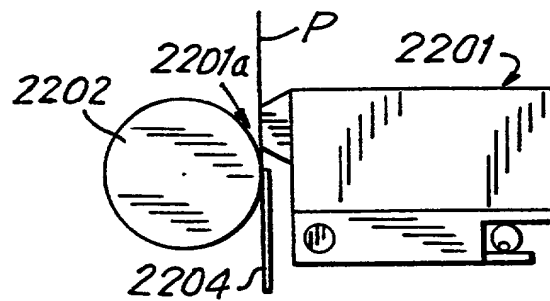


FIG.63
PRIOR ART



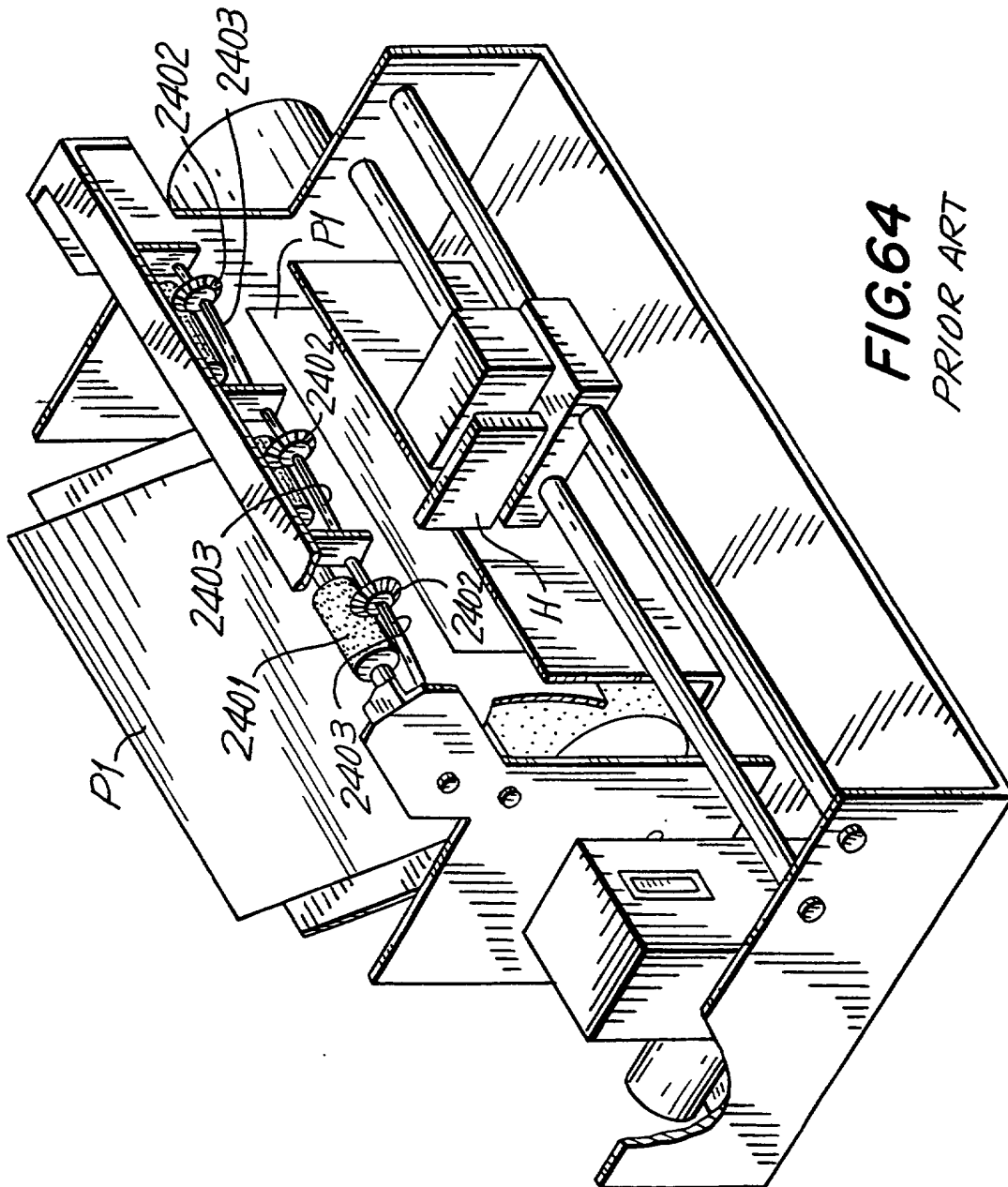


FIG. 64
PRIOR ART

FIG.65
PRIOR ART 2306

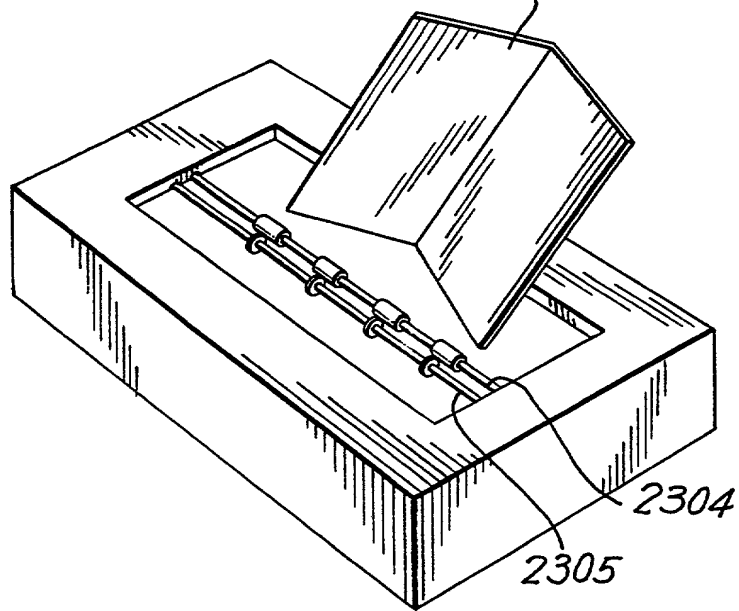
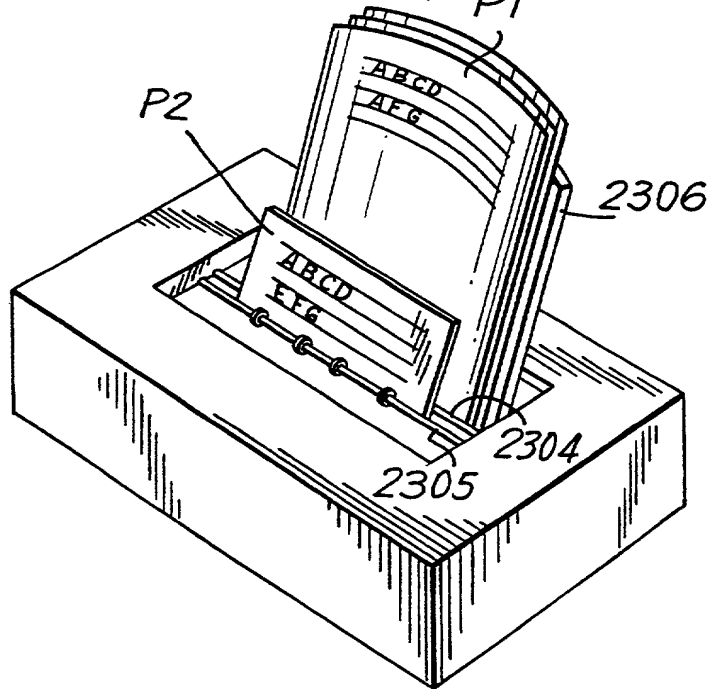


FIG.66
PRIOR ART P1



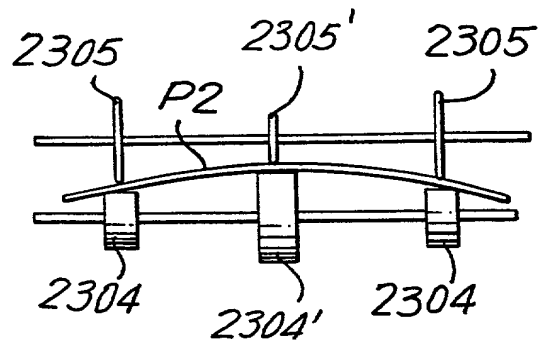


FIG. 67
PRIOR ART

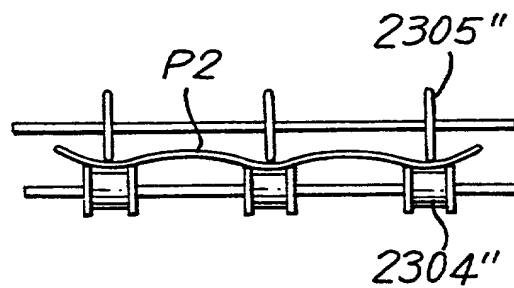


FIG. 68
PRIOR ART

